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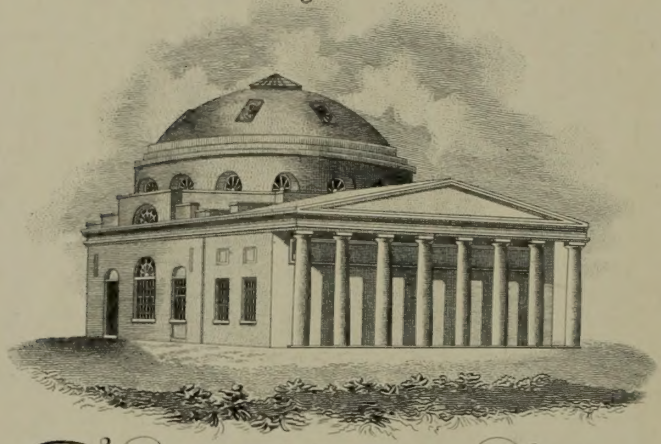

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1868 (c)

Author	Title
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Whiteford, H. Clay	Tight Lacing and Its Effects
Crogan, John M.	Etiology
Gott, R. T.	The Typhus Fever Epidemic of 1867
Beckham, William L.	The Progress of Medicine
Sweeney, Timothy C.	Typhoid Fever
Hall, James B.	Acute Rheumatism
Smith R. C.	The Anterior Suspensory Splint
Dulaney, J. Lambert	Mental Agency in the Treatment of Disease
Stone, Henry L.	Malaria
Chew, J. Thomas	Valvular Diseases of the Heart
Blair, John L.	Blood
Welty, Frank H.	Yellow Fever
Boyd, Philip W.	Aneurism

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UNIVERSITY OF MARYLAND

THESES

1868 (c)

Knight, Samuel T. Jr.	Rheumatism	42p.
Whiteford, H. ~~C.~~ Clay	Tight Lacing and Its Effects	32p.
Crogan, ~~J.~~ John M.	Etiology	44p.
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Beckham, ~~Wm.~~ William L.	The Progress of Medicine	17p.
Sweeney, ~~T.~~ Timothy C.	Typhoid Fever	31p.
Hall, ~~J.~~ James B.	Acute Rheumatism	20p.
Smith, R. C.	The Anterior Suspensory Splint	20p.
Dulaney, ~~I. L.~~ J. Lambert	Mental Agency in the Treatment of Disease	20p.
Stone, ~~H.~~ Henry L.	Malaria	34p.
Chew, J. ~~T.~~ Thomas	Valvular Diseases of the Heart	31p.
Blair, ~~J.~~ John L.	Blood	15p.
Welty, ~~F.~~ Frank H.	Yellow Fever	22p.
Boyd, ~~R.~~ Philip W.	Aneurism	24p.

AN

Inaugural Dissertation

ON

Rheumatism

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Saml T. Knight Dr

Of

Maryland

Session of 1867-68

1Mb
18936

[illegible]

The Nature of Pathology. Gener-
[illegible] its Scope and Science.

There are [illegible]
[illegible] occurrence [illegible]
and of small importance –
[illegible] in [illegible]
[illegible]
[illegible], or the [illegible] that
fatal results [illegible] which [illegible]
[illegible] followed [illegible]
[illegible] to the true Pathology [illegible]
[illegible]
[illegible]
from the fact that the [illegible]
[illegible]
[illegible]

[illegible] as well marked [illegible] by
intense and [illegible] [illegible]
[illegible] [illegible], self-dis[illegible]
[illegible] [illegible] [illegible] [illegible] the
[illegible] [illegible] [illegible] [illegible]
and each [illegible] [illegible] [illegible]
a distinct [illegible] [illegible],
The [illegible] of which Ph[illegible] [illegible] is
[illegible] generally [illegible] and [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
it, is dependent on [illegible]
condition of the child, [illegible]
of its leading and [illegible]
characteristic [illegible] [illegible] [illegible]
the same time [illegible] of
an affection [illegible] by a

[illegible]

[illegible] fluid, which is carried by the

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Treatment,

[illegible]

[illegible] the [illegible] and

[illegible] the [illegible]. The latter

often [illegible] the result of the [illegible]

[illegible] or [illegible] in [illegible] of the

Dyspepsia—Rheumatism, [illegible] Fever

and Pain. The Pain is generally

very severe in and around one

or more of the larger joints

generally [illegible] of them at once,

[illegible] sometimes it attacks several

of them in succession. It [illegible]

[illegible] of [illegible] of [illegible]

[illegible] joint [illegible], and

[illegible]

and [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] "The [illegible] to [illegible] [illegible]

[illegible] it usually called Mirabilis,

[illegible]

[illegible] [illegible]

appear in the first [illegible], and

[illegible] [illegible] [illegible]

which [illegible] [illegible] [illegible]

[illegible] perhaps [illegible] [illegible] [illegible]

to [illegible] quarter [illegible]

instances [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible] such subjects, where it is clear:

[illegible]

[illegible] dishearted and weakened the patient. The fever generally precedes [illegible]

[illegible] of [illegible] in, [illegible] of
[illegible] fever, and the perspiration,
especially at night.

[illegible] the [illegible]
Rheumatism, the Hand and
Limbs. [illegible] Inflamed
Rheumatism, [illegible]
inflammation commences not
in the joint, but near it, and
attacks the bones, muscles, and
ligaments, the muscles & in the
more [illegible] [illegible].

Spinal Rheumatism.

[illegible] the spinal marrow in the
joint becomes inflamed, and no
[illegible] fluid is poured out

consequently distending it considerably, and causes it to bulge out between the spaces intervening between the various binding ligaments around the joint. This form most commonly affects the knee-joint. Fluctuation may be readily perceived by simple manipulation. The swelling is more marked and comes on sooner in this form than in the others. The fever is intense, the tongue is furred, the skin hot and dry, thirst intense and the membranes of the heart are much less liable to become affected than in the former.

Tissues of the "Rheumatic Diathesis" and of Gout, as Dr. Watson has observed, it is a connecting link between Rheumatism and Gout, partaking of the nature of both, the one being third degree of Rheumatism. The following constitute a collection of symptoms denoting some important Cardiac disease.—Pain in or around the cardiac region, the left hypochondrium, increased by pressure in the intercostal spaces, by inspiration and by lying on the left side, with palpitation, difficult breathing and heart-

obtrusive. The [illegible] sound being the sighing of [illegible] the patient is [illegible] quiet, though there may [illegible] have taken place in the Pericardium, and decided disease existing there. Cardiac affections sometimes exist without the knowledge of the patient. The morbid sounds in the Endocardium are affected, are substitutes for the Bruit de Diable murmur, and attend the Systolic, or Diastolic sounds of the heart. The sound is generally louder at that point where the blood is most impeded.

The systolic sound is prolonged, altered; and at the point of impulse, the diastolic sound ends in a prolongation of the systolic. The bruit therefore must be in the left cavities of the heart; and it is right to infer that it is produced by a morbid condition of the aortic valves. The living murmur of the heart may be imitated without altering the sounds.

If we have pericarditis, we have an increase, prominence of the intensities of the sounds, as they are replaced in the praecordia, and this sound alternating with the tick, and

[illegible] the Heart's action, with bounding and [illegible]
[illegible] Lymph [illegible] Liver [illegible]
The [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
complication [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
its height. Diagnosis-
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
Court the [illegible].

The nation has a double
[illegible] the [illegible] of
the Free [illegible], but [illegible]
land shows a marked partiality
for the [illegible] [illegible]
intoxicants [illegible] the [illegible]
test. Drunkenness is not
attended with so much danger
to the Digestive organs, nor so
much [illegible] [illegible],
[illegible] [illegible] [illegible]
[illegible] of Lung [illegible] [illegible]
itself to [illegible]. Further,
I have [illegible] [illegible] that,
the [illegible] [illegible], [illegible] [illegible]
about the end of [illegible] [illegible].

sequelæ. The following are some [illegible]

[illegible]

adhesion of the pericardium, but [illegible]

[illegible] medically [illegible]

[illegible] care [illegible]

[illegible] the orifices where the valves are

placed, and consequently impeded

action of the [illegible]

surface, and vegetations are

produced and in [illegible]

[illegible], we have Hypertrophy.

Causes. [illegible] rheumatic, uric acid

poisons, with moisture are the

exciting causes. The [illegible]

[illegible] without [illegible]

[illegible] of the [illegible]
[illegible] and [illegible] [illegible],
the Lactic acid as it forms,
and by thus accumulating it in
the blood. [illegible] [illegible]
[illegible] produce it without this poison
[illegible] in the [illegible] [illegible]
that predisposition without which the
disease would never come, at [illegible]
[illegible] [illegible] [illegible]
[illegible] independent [illegible] [illegible].
If it was [illegible].

Prognosis. [illegible]
[illegible] [illegible] [illegible]
[illegible] "[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

[illegible] and the
[illegible] "inflammation usually
terminates, sooner or later, in
[illegible]
implicated or not".
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] The Treatment.
[illegible]
entire [illegible]
[illegible]
[illegible]
[illegible]
patient, [illegible] the disease,

[illegible] cal [illegible]
[illegible], [illegible], [illegible]
State of the abdominal secretions,
must all be taken into consideration.
[illegible] "[illegible]
[illegible] acute Rheumatism,
[illegible]. "If you seek for instruction
[illegible]
[illegible] practical [illegible]
[illegible] with a [illegible] implicating
[illegible] of [illegible]."
[illegible] [illegible] [illegible] [illegible] of
[illegible] active antiphlogistic
[illegible] in the [illegible],
[illegible] the present day prac-
[illegible] in Paris.

[illegible] give [illegible] Cinchona, such as Ph to Di, with or without a pill Pulv gro i-ij - and they repeat the dose every [illegible] hours [illegible] till the fever is [illegible], and as it is necessary. The disease is often apparently not [illegible], but there are many instances in which the disease is [illegible], and aggravated and [illegible] [illegible] the practice is adopted [illegible] and fairly [illegible].

Bloodletting is one of the most [illegible] results and in certain conditions most judicious [illegible]

[illegible] the [illegible]
with the [illegible] [illegible] the [illegible]
[illegible], and the [illegible] of
[illegible], bleeding from the arm,
especially if the extend [illegible]
and [illegible] [illegible] [illegible]
relief, the brain being [illegible]
interested should [illegible] [illegible]
[illegible] never [illegible], [illegible] [illegible]
been carried to a proper extent
sufficiently soon, also it maybe
[illegible] [illegible]
[illegible] [illegible] [illegible] [illegible],
[illegible] [illegible], [illegible] [illegible].
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

Reproduction are comparatively
[illegible] Then
it [illegible] [illegible] [illegible]
[illegible] not [illegible] [illegible] [illegible] per
iod has passed. [illegible] [illegible]=
=ies are sometimes [illegible]
[illegible] but are [illegible] [illegible]
[illegible] inevitable. [illegible] [illegible]
most [illegible] [illegible] in this
disease, [illegible] [illegible] of [illegible]
[illegible] and [illegible] [illegible].
The dose, and repetition of it,
should be regulated by the
observed effect. Enough should
be given to quiet or relieve
the pain. In the form of

Doses of Indian hemp are found in very large doses, to produce perfect insensibility, and in an round may be given to the patient, with the saying in an medical way. Dr. Corrigan of Dublin tests the opium alone, his commencing dose is gr i, and repeats or increases until the pain is relieved. The round pills are sufficient but it is true one must be that amount, when combined with other drugs. Colchicum has sometimes a very good effect, in mitigating the disease must be given with extreme

[illegible] on account of the
prostration and deadly nausea
it often causes. It is more
manageable in the spinal form,
or as it appears first.
It is likely to produce
intense nausea and vomiting,
griping and diarrhea and
when these consequences take
place, the inflammation of the
joints quite entirely subsides.
And it does [illegible] with
[illegible] the [illegible]
[illegible] of the [illegible] is
[illegible] and [illegible].
The following are the forms of

administration, – Vini Colchici
Semi ℳxx every 6 hours until some
result is obtained, or a grain of
the Extract, or of the medicated
Extract [illegible] [illegible]
[illegible] the [illegible] [illegible]
[illegible] in Pot [illegible].
[illegible] the [illegible] [illegible]
[illegible] without the troublesome
[illegible] – [illegible] [illegible]
[illegible] [illegible], [illegible] [illegible]
[illegible] acid, [illegible] [illegible] to be
a decided indicated and [illegible] [illegible].
[illegible] [illegible] [illegible] [illegible] any
[illegible] [illegible]. [illegible] [illegible]
Guaiacum [illegible] [illegible] used –

Potassae Tartrat is the most reliable of the salts. Dr Gerard administered it in the average dose of ℥ij every 2 hours, night and day, or oftener if the pulse did not fall from 20 to 40 beats. It did not calm the pulse rapidly, and did not lower the fever. In no instance did any affection of the heart, arise after the patient was 48 hours under its influence. It is large doses had been extensively used, and much praised.

The diuretics also tried — Digitalis, Squill, Hyoscyamus, Tr. Digitalis — in no instance

the third, as [illegible] tell us.

Dr Elliotson [illegible]

entitled to Potts act. He says,

I would not willingly use

language which [illegible]

contradicts with experience but I

do not believe I make that

I have never seen the disease in

question and don't be [illegible]

[illegible] any other [illegible]" xxx —

xxx "or in case has any ill

effect [illegible] the act in the

[illegible] and that to [illegible]

[illegible] more effective,

the ill effects [illegible] [illegible],

and [illegible] have [illegible] [illegible]"

And speaking of the "comparative immunity now conceded to in acute Rheumatism under particular modes of treatment," says, the impression in my mind is very deep, that the tendency to this most [illegible] complication, is very much lessened" by bringing into use the simple medication of Acet Potassae, The dose he usually employed and the manner in which it was given. Potassae Acetas, dissolved and given in diluted doses, in some [illegible] water.

Mr Watson's marks, [illegible]

vaccination will be found in my
opinion to consist in
adopting the treatment of
acute Pneumonia.
Together with Tea, Arrowroot,
Coconut, Purgatives & Diuretics, and
medicines may be variously
combined according to the
particular circumstances of the
case. In most cases the 3
following remedial measures with
the occasional application of
Vaccinum will cause the
disease not to run a fatal and
with less or little pain and
expenditure. With some, the

either could do singly, these are — Venesection, Opium, and Purgatives. The 1st by its sufficient action by subduing the high inflammatory and vascular action; which may cure the disease by allaying the pulse and pain; and Emetics and Purgatives may cleanse the Liver and Bowels and the whole system of a collection of morbid secretions, and so set the system free. Bark was formerly extensively used, and highly praised as a cure for Acute Rheumatism, but it is infinitely

[illegible]

The Decoction of Cinchona, is found in a [illegible] protecting the system [illegible] against the renewed agency of the cause [illegible] the original attack depended.

The mode of treatment by Lemon juice, in doses of ℥j to ℥ij - 5 or 6 times per day [illegible] [illegible] Dr. W. [illegible] at first against recent diseases in [illegible] the [illegible] [illegible] [illegible] active principle - Lemon juice is [illegible] Dr. [illegible] [illegible] the Kidneys, becomes converted

its back to full. There is a considerable
difference between the two [illegible]
[illegible] to [illegible] in this case.
During summer 1855, Dr. [illegible] of the
[illegible] Hospital [illegible], [illegible].
the application of blisters to the
part surrounding and adjacent to
the affected joints. Dr. Fuller
[illegible] Rheumatic Fever.
Rheumatism and [illegible]
[illegible] and [illegible]
[illegible] in a case of [illegible]
Inflammation. The inflammation is
[illegible]
[illegible] suddenly, and [illegible]
suddenly [illegible].

External applications.—

Repulsion of the poison, which is making its [illegible] joint, back again into the circulating blood, by cold applications to the parts, and [illegible] by the [illegible] of cathartics, diuretics and diaphoretics of this kind attended the use of warm fomentations, which often give [illegible] relief. Dr Bierson and Fuller have written [illegible] matter. Dr Fuller says [illegible] drive the poison, drive to perspiration, and thereby favor the elimination of the Poison

It is just within and outside
of mastication goes far towards the
alleviation of the pain.

Acute Rheumatism -

This form is very common, it occurs
among in the muscles. Pain often
severe but much less fever, and
swelling, than in the acute form.
In muscles it causes pain in the
muscles: in the ligaments and
of Bones it produces Tinnitus; in
the Bones - Cutaneous symptoms.
It receives various names, as -
Sciatica, when it affects the
muscles of the neck. Pleurodynia
when seated in the muscles of

Rheumatism, Lumbago, often
in the muscles of the Back;
Sciatica, when in the membranes
of Sciatic nerves; Pleurodynia, when
in the Ribs;
Acute Rheumatism is a disease
of Rheumatism which is neither
really acute or Chronic but rather
is moderate and the inflammation
tongue it lingers in many parts is
not very intense in any. There is
some fever, the skin is dry and
the joints hot and swollen. Urine
is strongly acid and accordingly
has been treated with success by
alkalies, as the Liquor Potassæ &c

tive, in divided doses, for several days, at same time giving injections to deep seated pain, the results are — the urine clears, pain abates, and the joints become sound.

Chronic Rheumatism

This may occur as a sequel to the acute attack, but sometimes it is primary, and also entirely independent of it.

Diagnosis — Generally not difficult. The pain is felt in the part, but there is not an exciting redness, as in the acute attack. The affected joints and muscles lose their power of motion, full

ness, and lameness sometimes follows. Chronic Rheumatism is divided into 2 forms. In the one, there is considerable local heat, and swelling, although unaccompanied by any expand=ing constitutional disturbance, while in the other form, the patient complains of coldness, (rather than heat) and stiffness of the affected joints. The former is very much like acute Rheumatism, and indeed it is sometimes merged into it and is frequent sequel of it. The usual remedies for acute Rheumatism though are opposed to it, or

indicated. There is no doubt but that
during the disease cures by leeches
and blood applications. Pain is
increased by pressure, and external
warmth, for example steam of the bed.
The complaint is obstinate, and
liable to recur. It often involves and
deforms the smaller joints especially.
Those of the knuckles, and fingers,
causing them to assume a "button"
shape. The fingers also the are
subject to nodular deposit. Dr. Budd has added
attention to the various circumstances
that the corresponding joints of
the sides of the body are always

affected precisely in the same manner. One crippled joint is just the copy of the other. The other room of Chronic Rheumatism, called Passive, usually occurs as an independent affection. The pain is aggravated by friction and the patient most comfortable when lying in bed, condition directly the reverse of the other room. They are much benefited by living in a warm climate, by warm clothing, warm rooms, especially in damp weather, at a temperature not below 100° Fah. the best path to. Friction, with some Stimulating liniment and Electricity, are

[illegible], and amongst the Internal remedies, Cayenne, Cod liver oil, Iodide Potash, Sulphur, Guaiacum, Dover's Powder and Sarsaparilla, all have a high reputation, but Fuller advises the Immersion as a remedy of peculiar efficacy. But first, the Cod Potash, given combined with a few grains of Iodine Ammonia, 3 times a day, is undoubtedly the best remedy. A person who is liable to Chronic Rheumatism, ought to always wear a band next the skin, during the day, and at night sleep between blankets, avoiding

[illegible] point the use of [illegible]
[illegible] the [illegible]
(P) Rumination [illegible] of [illegible]
[illegible] are [illegible]
[illegible] them, and [illegible]
the principle [illegible] the
course, we believe it [illegible]
our views.—

AN

Inaugural Dissertation

ON

Tight Lacing and its Effects

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

H. Clay Whiteford

Of

Maryland

Session of 1 8 and 1 8 18

[illegible] its effects

The subject which I have selected for your most honorable body to peruse, is certainly of the greatest importance, but which there is but little wrote directly about. Tight lacing of young [illegible] is a cause from which more diseases arise, than by any other [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ([illegible] be when so many fall victims to its [illegible]?) [illegible]? [illegible] [illegible] [illegible] to [illegible] [illegible] health? [illegible] terrible [illegible] [illegible] [illegible] [illegible].

[illegible]

it is a strange fact that every thing [illegible] be
[illegible]. At the present day the
dullest eye can see that woman laces for
fashion, & do not know what else they would do
[illegible] that they [illegible] [illegible]
others see them; they do not know how bad-
ly they walk while immersing some public
[illegible] with their chest thrown, or rather
[illegible] that they cannot
[illegible] right [illegible].
[illegible] grow
[illegible]
[illegible]
[illegible]
(as it [illegible]) or it would have been made so.
[illegible] not to display artificially what

[illegible] but sighing the [illegible] [illegible].
He might not [illegible] in the [illegible] —
He was woman's made; we are told that
[illegible] after his own image,
He clothed [illegible] from with [illegible]
the [illegible] as his own. He did not [illegible]
[illegible] of [illegible] and fine linen, but clothed
them with [illegible] and hair. He made
in his own [illegible], and in every way
[illegible] to [illegible] [illegible], He fitted
[illegible] [illegible] without regard to
either its minuteness or greatness; to every
[illegible] without regard to either its [illegible]
[illegible]. He [illegible] and that the human
[illegible] should be [illegible] and short, He in-
[illegible] [illegible] [illegible] of the

entire body do have grounds of [illegible].
[illegible] intend to have the body (mind
and soul) merged up into an insignificant
or [illegible]; or to have another creation
in my [illegible], but what, "Our first parents
being left to the freedom of their own wills
[illegible] this estate wherein they were created
by sinning against God." [illegible] and
[illegible] then did they see their nakedness,
and [illegible] as they saw their nakedness, they
[illegible] would [illegible] clothing themselves
[illegible] fig leaves, thus laying aside, thus
[illegible] God's [illegible] and
[illegible] [illegible], [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible]. This first act of [illegible]

the selves, was the first step towards
[illegible] [illegible] [illegible]
[illegible] (I think it might be say should)
[illegible] [illegible] [illegible]
[illegible] [illegible] rules the day, which we
followed, demands great sacrifice of
health and comfort to the followers.
The demands of "Fashion" "Fashion" [illegible]
from the corset being worn, it is, in a
word "the rule now". The corset may well
[illegible] [illegible] with [illegible], while [illegible]
[illegible] [illegible] [illegible] destroy-
[illegible] [illegible] [illegible] [illegible]. [illegible]
it does give a [illegible] form, it has
a [illegible] [illegible] in the same way that it
forces the Obelisk into a [illegible] [illegible]

his loins when about to engage in a contest with [illegible] or wrestling. Owing to the [illegible] of woman it makes it much more danger[illegible] to her than it would be to a man. It is a muscle of her [illegible]. But at the Greeks, the Cretans, the [illegible] they do not bind any part to tight, no more than is absolutely necessary; this is a fashion of wearing clothes, which is to be [illegible] by [illegible] people.

What is lacing? Lacing is a mechanical binding of the trunk by an elastic corset "Corset", by this mechanical means the waist [illegible] into [illegible]

[illegible] has [illegible]. The [illegible]
is made of different materials, of which
the most common are whale bone covered
with linen or muslin; or steel covered
with [illegible]. The [illegible]
or [illegible] of the [illegible] length in the
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] light
[illegible] [illegible] the [illegible] the [illegible]
attendant or rider to draw them [illegible]
lighter. [illegible] is [illegible] [illegible] by
[illegible] [illegible] [illegible] the [illegible]
which they are [illegible] to make them
[illegible] light [illegible] [illegible] to keep them [illegible]
[illegible] [illegible] [illegible] [illegible]

be easily avoided, and that is by wearing suspenders, which many do.

Effects. The first effect of this bearing on the clothing of the hips and the compression from the effects of the skin. The secretion of the skin is considerable when in the normal condition, which may be easily inferred from the number of glands that are in the skin.

[illegible] of them are estimated at from 3[illegible] to 900 to the square inch, 5000 to the [illegible] and from 700 to 900 to the square inch on the anterior of the [illegible]k; [illegible] of glands, (that is [illegible]) [illegible]

organs in effect [illegible]. Now it is evident that if the body be lightly compressed that this circulation is not perfectly carried on it must of necessity be checked; this being stopped in this route a stimulation must exist some other channel to go out of the system, hence some other stimulating organ must be resorted to, and if this does not get rid of from the system, will, and must, be poisonous to the economy. This section is extended indirectly as well as directly. Viz: the circulation is impeded to a considerable extent, upon which depends the health of a [illegible] action of the

this. Respiration is one of the most important reflexes, the muscles of the body being engaged together more by far than nature has done, there is not freedom of movement for the muscles of respiration; the muscles which take an active part in respiration have not been to relax others not being permitted to contract, in order that the chest might be effectually expanded so that deep inspirations might be taken, so as to get air expelled as possible.

The abdominal muscles are crowded out of action, but these muscles in the thorax do not play as im-

[illegible] a part in respiration as in the [illegible]. Nature has [illegible] the female in this respect that the [illegible] must be brought into [illegible] action in respiration on account of the infantile organs contained in the abdomen; but this light [illegible] strips what little [illegible] muscles would do in [illegible] respiration. But we have the diaphragm which is the most important muscle of respiration. This large and powerful muscle resembles something like the [illegible] of a [illegible] in its backward and forward [illegible]. In relaxing it compresses the lungs with the aid of

the abdominal muscles and viscera and drives the air out, then contracting it makes a vacuum in the chest, when the air rushes in immediately to fill it up. Again the intercostal muscles which perform considerable activity in respiration [illegible] or nearly so, the ribs being so compressed together, immediately from the pressure and kept there by it, it is [illegible] to perform their proper functions. So [illegible] also being attended, as it usually, [illegible] for [illegible] this [illegible], hence the [illegible] and in great difficulty of breathing, [illegible], there is a deficiency in the [illegible] of [illegible] through the lungs

I do not say that the above is always the case, [illegible] unless they [illegible] been so tight for some special occasion. While in this [illegible] and [illegible] these [illegible] you will [illegible] [illegible] the [illegible] of [illegible] of health, but [illegible] the cause rest upon the tight [illegible]; and if the family physician should tell [illegible] that [illegible] trouble [illegible] tight [illegible], the [illegible] invariably say "why I don't [illegible] [illegible] [illegible] [illegible] [illegible]

and corset. While at the same time it would be so tight that a surgeon would with difficulty get a good sized exploring needle under the corset.

If the chest is thus bound around so very tight, the tight [illegible] being shut off from the [illegible] and [illegible] of [illegible] upon them from the sides jams the thoracic organs into an almost [illegible] space. This [illegible] of [illegible]ation is a very serious matter, [illegible] is one of the most important [illegible] that [illegible] in the [illegible] by it, is the venous blood [illegible] in [illegible].

[illegible]

[illegible] the lungs; that second by the in-
[illegible] [illegible] — the
[illegible] only serving or acting as
[illegible] to [illegible] the [illegible].
[illegible] be [illegible], the
[illegible] of the [illegible] [illegible]
[illegible] [illegible] [illegible] of air,
[illegible] [illegible] the [illegible] [illegible]
[illegible], without this [illegible] [illegible] the
[illegible] [illegible] [illegible] [illegible], the
[illegible] [illegible] [illegible] [illegible] [illegible]

suffers when he goes into a very close [illegible] filled with people, in the [illegible] his sensations is [illegible] to the [illegible] of the air, which is already loaded with carbonic acid and effete matter taken off from those present, hence you see the necessity of plenty of good air: it is essential that oxygen be supplied to the tissues in order that the various processes of repair and waste may be duly carried on; if this supply of oxygen be cut off the carbonic acid gas must and will accumulate: from experiment, it is a known fact that when this gas is inhaled instead of oxygen, the individual dies in a short

time by an absolute arrest of the circulation of the blood, but more particularly by its powerful effects upon the nervous system. Upon the motion of the blood depends not only the life of the individual; but also the beautiful rose red color of the maiden's cheek; the beautiful vermillion hue of her lips; the brilliancy of her eyes; that expression of true love of the whole face which is sought so much for by every one who is in love and admirer of the beauty of nature. With all this beauty, vigor and strength, can she with all this love, not only in her heart, but also in her very countenance, she is

ready to lavish it upon some one to make happy: for what is life without its love and happiness; or "what is love if darkness can cover its light, or young flashing its life?"

It will now state of the circulation of the heart. The heart—as every medical man knows—is a hollow muscular organ, of which the outside structure is very delicate, hence it is not difficult to put out of order; it is the seat of the circulation. And it may say the centre of life, for by it, is the source of life propelled throughout the system. And the moment it ceases to propel the blood—life ceases.

1. the heart being squeezed up into a small space has not sufficient room to act, and the blood vessels being pressed upon by the light lacing, the heart is required to act with more vigor, in order to propel the blood throughout the system. Now it is a known fact that increased activity of a muscle will increase its size, therefore we have hypertrophy of the heart. If there should be valvular disease of the heart, light lacing would be very dangerous. I have before my mind, at this time, a case of one of the <u>beauties</u> of Baltimore (which came under the notice of such was related

(Prof. McCherry) who in preparing to go to a "ball" in the city, laced very tight; after being at the ball for a short time, she began to feel faint, and proposed to her husband to go home. They started immediately but before going far she fell to the pavement; the spring was sent for Dr. McCherry but before he could render aid she expired. In this case the heart being diseased (organic disease) was no longer able to propel the blood under such obstruction. The lungs are very seriously affected sometimes. Tuberculosis is brought on by degrees, but it is properly a secondary result, resulting

to the pathology of the eminent physician, Pathologist Trousseau, "Scrofula is a disease of the primary digestion", which I shall take up later.

The death rate proves the remarkable fact that there are a greater number dies of tuberculosis than any other one disease. Certainly there are among the dying this disease when it is derived hereditarily, without having it ever by contagious family.

The sad is the spectacle to see a promising young lady just in the blossom of her youth, wasting away little by little, her precious life, from the terrible disease. Many are the sad

neglections of parents, when they recall the past when they indulged the wishes of their beloved daughter, in their haste to get them married, and, when it is too late, they see what they have done, they see the continual grave they have prepared them to come to. Costiveness and Dyspepsia follow as secondary results. The circulation is obstructed, the nervous fluid passes through the internal, what have we arising from this? Congestion is the immediate result, from which dyspepsia arises; the affection generally attacks the lower bowels

and is very troublesome, to say the least. We have also Crural phlebitis or phlegmasia dolens, a disease which mostly follows labor, but it is sometimes produced by congestion of the blood in the veins. The blood being obstructed, the liquid part of it is thrown out in the cellular tissue of the parts where the congestion may be; generally it attacks but one side, but both may be inflamed.

Piles is not an uncommon result, owing to the congestion of the blood in the hemorrhoidal veins.

Laxitating Uterine Catarrhus, the latter generally arising from irritation of the

uterus. We come next to speak of the abdominal viscera. I will first take up the liver — 1st. If liver is displaced; being displaced it cannot perform its proper functions perfectly. 2nd there may be congestion, which may arise first — directly from displacement and pressure and second as a result of disease of the heart, 3rd inflammation may set in and finally suppuration.

We come next to speak of the stomach.

The stomach, the most important organ of digestion is one of the great sufferers. Digestion appears to be performed with great difficulty

and very often food is passed off by the rectum without undergoing the process of digestion at all. The stomach has not power enough to digest as it would have; during digestion the stomach is charged with blood in order to supply the wants of it, now if this supply of blood be impeded in any way, there is certainly a deficiency of blood in the organ, therefore it is not able to digest with despatch as before under more favorable circumstances; from this, dyspepsia in all its forms comes up; This is a disease from which so many suffer [illegible];

[illegible]

to be imperfect; for as the nutritive properties of the blood depends entirely upon the proper assimilation of food, it must under these circumstances be impoverished; hence there is imperfect growth of tissues, consequently wasting & feebleness, phthisis must follow. But there is no disease that is more in the hands of the physician than this is, "Slay but [illegible], and the giant dies".

It is generally the lot of the physician to have more to do with the patient than the disease; and without the patients cooperation, it is utterly

impossible to cure it. If passing through the intestinal canal undigested, acts as a foreign body, it irritates the mucous membrane which if continued, must result in inflammation, which is rather a serious result.

We shall now take up the consideration of the internal organs of generation. The first effect upon these is the displacement, to go back a step — the stomach and other viscera being displaced, seek the next easiest place to rest, down in the lower part of the abdomen is that place and in going downwards they first have very important organs before

them, viz; the uterus and bladder.

The bladder being pushed down, the neck becomes irritated, and it is no longer able to retain the urine effectually; this pressing down of the bladder stretches the ureters, and they being pressed between the os pubis and the bladder, the urine flows with difficulty down them; and then both they and the pelvis of the kidneys become dilated with a corresponding atrophy of the secreting substance of the organ.

Another very common result of the abdominal viscera being pushed down in femoral hernia, and frequently

being strangulated, causes many sudden deaths. The uterus being forced down into the pelvis forming prolapsus uteri, and it may be either retroflexed or anteflexed.

Now it is very evident that it cannot perform its proper functions if it is any of the abnormal positions. The patient will be subject to dysmenorrhoea and perhaps amenorrhoea; and owing to the congestion in the uterus there will be irritation of the [illegible] which must cause a later result in inflammation and ulceration.

The patient will be complaining

of pain in the head and back, which she thinks neuralgic, the mucous membrane which she attributes to a cold; her heart flutters and she says, she has palpitation of the heart. her hands and arms, her feet and especially her lower limbs are cold and chilly, it is almost impossible for her to keep warm. Her limbs also take cramps which she thinks rheumatism. Now all these pains and aches arise solely from the diseased uterus.

All from the health of these organs of generation depend the future happiness of the woman. If these organs

are not healthy they will not, cannot perform their proper function, in a proper manner, of which the greatest of all is bodily growth;
A period to which the young mother looks forward to with the interest amounting, she fictures every thing that is imaginable for many months fictures in the coming of her infant. She imagines she will be the happiest creature on earth, when the time comes that she can call a sweet little baby her own,
"—— Dearest love pronounce blessing on earth."
And such is the case too, see the young mother fondling her infant, she feeds alone as it were upon the

love and affection she has for it, it is her only care, the uppermost thought in her mind, at all times, and why should it not be; Do we not find in that book of all books, the bible — "Suffer little children, & come unto me, and forbid them not, for of such is the kingdom of Heaven".

I am gentlemen most respectfully,

H. Clay Whitford,

AN

Inaugural Dissertation

ON

[illegible]

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

[illegible]

Of

[illegible]

Session of [illegible] 18[illegible]

Etiology.

It is frequently urged by persons, when the subject of the causes of disease is mentioned to them, that the information which may be communicated to them upon this subject is of little value, as they understand these causes as well as can be explained by a medical. At first sight, such a statement may appear plausible, yet when we come properly to examine it, we will observe that it is only partially correct; because, when the evil resulting from any source is

thoroughly known and appreciated, no sane person living will expose himself to circumstances which will inevitably prove injurious. No person will burn his hand into the flame of a fire, because he knows he will be injured thereby. The person may, however, expose himself to cold, or to the causes which will produce fever, not because he is unaware that such exposure is wrong, but because he has never realized, as in the case of the burn, a full appreciation of the injurious results. Thus

One man says, I know very well that if I expose my self to cold, I run the risk of fever, or rheumatism. He knows this, but his knowledge is like that of the historical miller who relies for his facts upon tradition, not inquire of him how or why the exposure causes disease, and he is not able to explain. He, I say, he may know, but one not possibly assign the basis of his knowledge, or reason. Such a person is not able to himself when he denies the value of writings explaining the

in U.S. Again: most persons have traditionally heard of many of the incidents connected with the wars of this country, yet few, for a long time, for the reason, would consider it wise to refuse a book containing a more minute and accurate account of these events. So, although the great mass of people have heard, and read, brief statements of the causes of disease, it certainly would be unwise in them to refuse to read an essay upon this subject, which might perhaps,

had been to greater attention in the observance of means which would avail for life, and prevent health, and long life. I hope for being a response to these causes, as well as an explanation of the ways in which the effect these evil consequences, will be I am sure of great service to many readers, both as regards the preservation of health, and in a pecuniary sense. Exposure to cold is undoubtedly one of the most common causes, if not, indeed the most.

common cause of disease. Colds, Catarrhs, Fevers, Inflammations, Rheumatism, Phthisis, and a host of other equally severe or serious maladies, are the evils to which the human family is subject from the influence of this cause. To experience the injurious consequences of cold, it does not require that one should remain in a cold atmosphere until chilled through; it is equally pernicious to pass suddenly from a cold atmosphere to a warm one; or vice versa, especially if the

former be dry and comfortable, and the latter be moist and open; to remain standing in a cold, damp place for a long time, as it frequently does by boatmen and fishermen; to remove the outer garments, sit down and rest when in a state of profuse perspiration, even in mid-summer; to warm the feet by a good fire, and then get into a cold bed, or stand upon a cold floor, these are all circumstances which give rise to disease in the system. Now it is a matter of some

importance not only to know that exposures of this kind are productive of disease, but likewise to understand why they are produced. The skin with which the whole extent of the exterior surface of the body is covered, is a dense, thick, membranous layer, composed of short fibres, that are interlaced and plaited together; numerous nerves and bloodvessels, called, from their very small size, capillary vessels and nerves, fill the skin so thoroughly, that it

is not possible to pierce any part of it with the finest instrument without causing blood to exude, and at the same time producing more or less pain. Besides the nerves and blood-vessels, there are numerous other vessels, terminating upon the surface of the skin in minute openings, whose action is to remove from the blood, an oily substance; together with the matter of which perspiration is formed, thereby not only keeping the surface of the skin moist and soft, but likewise removing from the

blood an amount of decomposed particles, which would give rise to serious disease were they not removed from this fluid by these perspiratory vessels. The perspiration passed off by these minute vessels is of two kinds, one termed sensible, and the other insensible. The insensible is that which passes off in such minute amount as to be unnoticed by a person. It is constantly passing from the skin, when this is in a healthy condition. Sensible is that which stands upon or flows from the surface in drops.

It is estimated by physiologists that the amount of decomposed particles eliminated by the minute vessels, daily, is from thirty three to one hundred ounces. This has only reference to insensible perspiration, the sensible being of course much greater. When one is exposed to the influence of a sudden or continued cold, the blood-vessels contract, and are thereby prevented from receiving their proper amount of blood. This interference with the circulation in these vessels compels the blood to force itself, as it were,

upon internal organs, carrying with it all the decomposed matter which should be carried off in the form of perspiration, through the perspiratory vessels. The contraction caused by the cold is not limited to the blood-vessels; the perspiratory glands and tubes also become in a state of constriction, and cause to remain from the system the substances that ought to be eliminated. What, then, is there in this disturbance of the animal machinery to give rise to disease? Let us examine. Between the skin and all the organs

within the body, there is an intimate sympathy or relation, so much so that whenever there is any derangement of the parts, the latter always presents symptoms indicating that they are aware of and have been influenced by the derangement of the former, and these symptoms are in proportion to the degree of disturbance produced, and are due to the fact that one or more of these internal organs are being called upon to atone for the deficient action in the vessels of the skin. The trouble caused is not merely a

check of perspiration and the driving the blood from the surface to the central organs of the body, but still more, all the diseased particles it contains are carried along with it to exert injurious consequences upon the organs to which the blood is impelled, and thus the harmony existing between the various organs of the body and the circulation has become deranged, and parts are made to bear burdens or perform offices which is not required of them naturally. If disease is produced from these circumstances,

its form and character will greatly depend upon the condition of the patient, the influences surrounding him, and the resisting power of his system to disease. For every person has a greater or less power of this kind, as may be observed by the different results upon two persons exposed to the same cause of sickness; one of them falls ill, or he effect from it, while the other is affected seriously. If there is any epidemic or contagious disease in the neighborhood, the person who exposes himself will be liable to suffer an attack from one of these, while one

thing may be. Otherwise, some organ weaker or more disposed to diseased action, will be the most liable to yield to the injurious influence caused by an increased quantity of blood being forced upon it. Suppose for instance, this organ is the lungs — an increased amount of blood passing through them oppresses them, causing irritation and even inflammation. The patient's breathing becomes more or less difficult, — cough occurs, with or without an expectoration of mucus, perhaps pain is present, and he becomes attacked with pleurisy, bronchitis,

or inflammation of the lungs according as the disease locates itself in the air-tubes, proper substance of the lungs, or their external covering. When the resisting power of the system is sufficiently vigorous to prevent any injurious effects upon the internal organs, a reaction takes place: the blood is driven back to the vessels of the skin, distending them to their natural size, the perspiratory vessels are thereby excited, perspiration is induced, the various functions go on as if nothing had occurred, and the person remains free from disease.

Atmospheric impurity is an abundant source of disease. But it is singular, how few of the numerous exhalations which render the air impure, are definitely known. Carbonic acid, carbonic oxyde, the different forms of carburetted hydrogen, and sulphurous acid, are almost all that proceed from natural sources, or ordinary ~~natural~~ artificial processes, in quantities likely to prove injurious to health. But besides these, numerous aeriform products, not well ascertained, are constantly evolved by vegetable and animal exhalation, by spontaneous decom-

position of organic and mineral substances, by combustion, by manufacturing operations, and by evaporation of every liquid on the face of the earth, which tend to contaminate the air, and render it more or less noxious to animal life. The morbid effects of all these aeriform products may be embraced under the following heads. For the first place, when sufficiently concentrated, they may destroy life by excluding atmospheric air from the lungs, and thus producing asphyxia. This they may do by entering the lungs, and thus taking

the place of pure air, or in consequence of their irritant properties, by causing spasm of the glottis. Secondly they may be simply irritant, and act by producing inflammation of the air passages. Thirdly, they may be absorbed both through the lungs, and through other avenues, as the skin, and mucus membrane of the stomach, which they may reach along with the saliva; and thus entering into the circulation, may exercise a poisonous influence upon the whole, or any part of the system. It has been observed that, in certain regions of country

where abundant vegetable decomposition accompanies an occasional overflow of the soil, and at the season when this decomposition is most rife, a certain class of diseases is wont to prevail, entirely distinct from those which arise from contagion, or changes in the sensible qualities of the atmosphere. This result has been usually ascribed to miasmatic exhalations, which have received the name of marsh miasmata, or malaria. In what manner this poison operates in producing disease cannot be known until we know their nature. The

probability is, that they enter the circulation by means of absorption, and that the chief avenue through which they enter is the air cells of the lungs. It is not impossible, that they may also be absorbed through the skin, and even through the mucous coat of the stomach, which they may enter with the saliva. A full meal, and the stimulant influence of ardent spirit, are supposed to afford some protection against them. Absorption is probably impeded by these means, and, thus far, they may act as preventives of the malarious influence;

but just in proportion to the protection which ardent spirit or other stimulant may yield, during the period of excitement, will be the greater liability to attack, when excitement shall be succeeded by depression. The most striking and characteristic morbid effects of miasmata, are intermittent and remittent fevers; but they are believed also to be capable of producing diarrhoea, cholera, colic, dysentery, various hepatic and gastric derangements, and neuralgia. Inhabitants of malarious regions are apt to exhibit signs of feeble

health, in their spare habit of body, sallowness of complexion, uncertain appetite, and irregular bowels; and persons are not unfrequently found with enlarged spleen or liver, and even dropsical symptoms; but how far these are the results of the miasmatic poison, it would not always be possible to determine. Authors assert the race is liable to degenerate, under their long-continued influence, becoming smaller in their bodies, and weaker, also less vigorous in their intellect. It has even been said that cattle transfered to miasmatic districts

from healthy regions, are apt to sicken and die. The system, however, becomes habituated to them in time; and individuals who have survived until the middle period of life is passed, often live until an extreme old age. It is even asserted that the influence becomes at length essential to health; and that old persons who have passed their life in malarious districts, are apt to sicken upon removal. The inhabitants of such districts are much less liable to malarious diseases than strangers, who are almost always attacked in the

sickly season. But, if life is spared for a few years, the susceptibility to the poisonous influence diminishes, and the individual is said to have become acclimated.

Again; there is probably no one cause to which disease is more attributable than our improper use of food, both as regards quantity, quality, modes of eating. Yet we find persons who clamorously oppose what they consider excesses in injurious articles, as drinking intoxicating liquors, chewing tobacco, these same persons are guilty as guilty of dissipation and intem-

perance — because these times are not limited to any one or several articles or modes of living — as manifested in their excessive eating and drinking, and in the use of articles which do not agree with them. Food may be used improperly in various ways; thus, one man may eat articles which do not agree with his stomach, or which are indigestible; another may make use of food too stimulating for his system; a third may eat too much food, and overload his stomach; a fourth combines too much fluid with his food; a fifth mixes

alcoholic drinks, as, wines, brandies, or ales, with meals; a sixth eats too fast, and does not chew his food sufficiently; a seventh having a weak stomach, or from other cause, finds his appetite only moderate, and, now for the purpose of pleasing his taste than for giving nourishment to his body, makes use of various sauces to goad his stomach, so as to cause a forced or artificial appetite; and then I might go on and name various ways in which mankind make an improper use of food. But it is not so much the design to enumerate

each particular article, as to explain how disease is occasioned by the same. There are certain articles in common use which are entirely indigestible, and contain no nutrition, as cucumbers, pickles, &c, and although these may be taken for a time by persons having strong digestive powers, yet a continuance in their use will ultimately give rise to disease, such as, dyspepsia, sour stomach, or other disorders; and it may be laid down as a general rule, that all those articles which dispose to diarrhoea, dysentery are unfit to be used as food.

At the small end of the stomach, just as it opens into the duodenum, is an opening termed the pyloric orifice, which is composed of strong muscular fibres passing around it, and which, by their contraction, close up the orifice, and act as a valve, preventing the food from leaving the stomach until it is perfectly digested, as soon as this ensues, it opens and allows only the digested food to pass, immediately closing upon that not yet reduced to chyme. Now when an article is indigestible, after a great but useless effort on the part

of the stomach to digest it, it is sent to the pilloric orifice - the valve, true to its duty, sends it back to the stomach for digestion, and it again attempts its digestion, until wearied out by fruitless efforts, it once more thrusts the article toward the orifice, to be again sent back for digestion, finally the stomach and valve become wearied out with their efforts; the latter relaxes, and the indigestible article glides through without meeting any further resistance. Surely there must be a certainty of disease of the stomach, cancer of this organ,

or some other serious affection, if such a course be daily persisted in. Meats are more stimulating than vegetables, causing an increased heat of the body, as well as imparting a greater degree of nourishment. Persons who labor, and thus exhaust the system more rapidly than those who are sedentary, may use meats with advantage, while the latter class of persons should partake of them more sparingly. But if these indulge in the more stimulating diet, without exercising to remove the surplus amount of stimulation

produced, fevers and inflammations, skin diseases, scrofulous affections, and impurities of the blood must inevitably be the consequence. When too much food is taken into the stomach, as is almost always the case with persons who eat too fast, a portion of it, does not come in contact with the gastric juice, and hence remains undigested. This portion passes through the same process as above mentioned with regard to indigestible articles, wearying out both the stomach and pyloric orifice, and giving rise to weakness of stomach,

dyspepsia, and other disagreeable symptoms. The use of alcoholic drinks, and stimulants to arouse an appetite, effect injury by stimulating the stomach to act more energetically than is natural, and thereby causing the gastric juice to be poured out in greater quantity than is required. This renders the digestion much more active for a time, but, like everything which has been over-worked, it soon flags, acts feebly, and thus interferes with the process of dissolving the food into chyme. Frequent overworking

of this character, followed by a tired and weakened condition of the stomach, must sooner or later, inevitably give rise to disease of the stomach, dyspepsia, &c; all these articles, then, are not only useless, but are exceedingly pernicious; they destroy the natural sensibility of the taste, so that all plainly cooked dishes become insipid; besides, they exhaust the vital action of the stomach, and give no nourishment nor strength, to say nothing of the poisonous effects of all alcoholic liquors, when once the alcohol become

absorbed into the system. Active excercise just before, or immediately after, a hearty meal, is exceedingly injurious, and with some persons, really dangerous. This is owing to the fact that while one part of the body is actively engaged in the performance of its functions, the rest can only be in a passive state. When the mind, or the body is actively engaged, the vital energy is necessarily drawn from the stomach, so that if this organ contains any food, its digestion is interfered with, and it must lie in the stomach as a crude, foreign body,

irritating and enfeebling the organ to a great degree. Again, when the nervous or muscular systems are wearied by excessive labor, just before a meal, the whole system becomes wearied also, and no part of it feels disposed to act even to its usually natural degree; at least, not until after a period of repose and tranquility; because the exhausted nerves and muscles require all the blood and energy to sustain and restore them to their natural condition, and this blood and nervous energy is also required in the stomach for the purpose of digestion; but this can-

not be, as it is contrary to the laws of the system to have healthy energetic action going on in two portions of the body at the same time. And these are the most common causes of disease from a non attention to diet.

A fourth very common cause of disease is exposure to, or residence in places where the atmosphere is foul or impure, especially in illy ventilated rooms. Where there is a constant flow of pure air, there is no chance for any disease originating from its impurity, for a constant supply of pure air is as necessary to health and life,

as a fresh supply of water is to a fish. Confine a fish in a tank of water, and he soon dies, but give him constantly, or even daily, a renewal of the water, and he will continue to live, and the same rule holds good in relation to mankind and the atmosphere they breathe. We may build houses with many doors and windows, with high ceilings, and the rooms may be kept perfectly clean as well as the whole house and adjoining yard, yet unless we have a proper ventilation, a good and full supply of pure air, we may rest assured that

disease of some kind will inter sooner, or later, and if this be true, how much more dangerous, when in connection with it we have filthy, unclean rooms, foul yards, all giving out most poisonous and disgusting odors. I cannot understand how it is that persons whose stomachs would be turned at the thought of eating impure meat and vegetables, can suffer their mouths and teeth to be defiled by a constant contact with that which is still more disgusting, offensive, and destructive to health, to wit: the foul, putrid gases or vapors given off by the decomposition

of animal and vegetable refuse, and yet we find that persons may so accustom themselves to the presence of such poisonous air, that they will hardly be aware of its presence even when their attention is called to it. The habit of sleeping in a room with the doors and windows closed is, as a general rule, very injurious. People say the night air is bad and they must keep it out of the room; but, night air is less unhealthy than that acted upon through the day by the sun, yet it is much better than no air at all, and is usually superior

to the atmosphere of a confined room, which is surcharged with the carbonic acid thrown off from the lungs of its inhabitants, and nearly deprived of its oxygen. To avoid these effects, every house should be well provided with ventilating apparatus, so that the air, as fast as it becomes surcharged with poisonous vapors, may pass off, and its place be supplied by a purer atmosphere. The foregoing are I think the most ordinary causes of disease, and in closing my imperfect remarks upon this subject, I would say. For, although health, happiness, and

prosperity may thus far have smiled upon you and your families, you have no guarantee or assurance that your imagined future, full of dazzling and glittering gems of enjoyment, will not be changed into cups of bitter disappointment, filled with the most heartrending and intolerable anguish that weeping humanity was ever called upon to endure. Let not the blessings you now enjoy cause you to become indifferent to, or regardless of, the laws of health. In time of peace, can we not with wisdom prepare for war? Then, while prosperity

smiles upon us, and there is not a cloud to darken our horizon, let us prepare to meet adversity, should this overtake us; while we are in the enjoyment of health, let us be prepared to meet and battle with disease and death.

AN

Inaugural Dissertation

ON

The Typhus Fever Epidemic of 1862.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

[illegible]

Of

[illegible]

Session of 1868.

The notes from which the following report is compiled, were not taken with any purpose of combining them into a report. They are far from being as full as I would wish. I resolved in the begining of the epidemic, to obtain the Thermometric heat twice a day, of all who came under my charge; in this I only partially succeeded, it being frequently impossible to obtain a Thermometer.
The statistics given may, I think, be relied upon as correct, they are made up from my own report book, and from those of the other students. Several were sent to the tent, who, it was found afterward, did not have the disease, they are not included in the list.

During the Spring of 1867, from March to May, inclusive, there were treated at the University Hospital seventeen (17.) cases of Typhus fever. Of this number eight (8.) were brought in from boats engaged in dredging for oysters on the Chesapeake Bay; they had been exposed during the day to wet and cold, and at night were crowded together in the close, filthy holds of the vessels. Of these, I think two (2.) were white, the remaining six (6.) negroes. They were all, when admitted, remarkably dirty and ragged.

Eight (8.) of the remaining nine (9.) contracted the disease in the wards of the Hospital, the other one (1.) in the city. Seven (7.)

of these were white, two (2) negroes.
A notable characteristic of the disease was the absence of any marked preceding malaise as in typhoid fever; a majority were cases of abrupt invasion of the disease. The patients were seized with pain in the head, back, and limbs, accompanied usually with a chill. The bowels were constipated. Countenance of a dusky hue, heavy and expressionless. Conjunctivæ injected.— this last symptom merits, I think, more importance than is usually given it; in no case have I seen it absent, and it is one of the first symptoms to appear.—
In only two cases was delirium noticed;

in one of these it was very slight, in the other, mental imbecility remained after recovery from the disease. The tongue and teeth were covered with thick, dirty-brown sordes. The maculae were observed in every case where the color of the skin did not hide them. They appeared on the second, third, or fourth day of the attack, usually on the second; they were at first of a dirty pink color, but gradually became darker; they would disappear on pressure the first day or two, but not after that time. All the authors I have consulted on the subject, agree in the opinion, "that the copiousness of the eruption represents a corres-

ponding gravity of the disease." This rule did not hold good here. In the case of Johanna Mc Donald, a servant girl,- a report of whose case I shall append.- the eruption was far more abundant than in any other case noticed, appearing thickly over the whole body; yet hers was one of the mildest we had. In the case of John Wilson,- a report of which I shall also append,- the most severe case we had that recovered, the eruption was very slight. In all of the others it was about equally exhibited.

The skin during the disease was hot and dry, temperature from 100° to 105° F. Pulse frequent, ranging from 120 to 150 beats to

the minute. Respirations hurried, ranging from 20 to 60 per minute. The breath was very offensive. Urine scanty, we did not examine it for albumen.

The average duration of the disease was about fourteen (14.) days; maximum twenty-five, (25.) minimum eight. (8.). The patients convalesced rapidly after passing the crisis.

Each case, as soon as diagnosed, was removed to a large, airy tent erected for the purpose, on a lot in the rear of the Hospital. They were given as much beef-tea and milk as they could digest, brandy, half-ounce every two hours, and Hydrochloric acid, from ten to twenty minims

every three hours.— The latter was given with a view to correct the super-alkalinity of the blood, supposed to exist in this disease.

By removing them to the tent, we prevented the disease from spreading with such fearful effect as it did in the Spring of 1866, when over thirty patients, including two of the students, were swept off by it. In this tent they were exposed to every vicissitude of weather, yet in no case were there any complications. In all who recovered, improvement was noticed almost from the moment of their removal. All expressed themselves as being far more comfortable than when they were

confined in the close wards of the Hospital.

Of the seventeen (17) cases treated, two (2) only died, both of whom contracted the disease in the house. One of them, a white sailor, had been under treatment for varicose ulcers for about three months; he died two or three days after the disease was diagnosed. The other, a negro sailor, had been under treatment for Phthisis, for nearly two months. He left the house and was absent eight days, when he returned with well-marked symptoms of Typhus fever; he died on the third day after his return. They were both in an anæmic con-

dition when attacked, and sank rapidly. Professor Donaldson's practice of combatting fever by food, instead of by antiphlogistic remedies, so called, recieves strong support from these cases. Instead of the long, tedious convalescence of cases treated by the latter method, most of our patients were able to leave the house in comparatively good condition in a very few days after the fever left them. In none of them was there much emaciation. Being kept up during the attack, by as much food as they could digest, they were in a condition to recover rapidly as soon as the fever left them.

Case 1st.

John Wilson, white sailor, age 25; admitted into the Infirmary, Jan 25th. Diagnosis, Syphilis. The symptoms having all disappeared, his treatment was stopped March 15th.

On the morning of March 19th, he assisted in removing a Typhus patient to the tent; he was with him not more than ten minutes; had never been exposed to the disease before; no case had occurred in his ward. In the evening, he was seized with pain in the head, back, and limbs, accompanied with a well marked chill. Complained also of tightness across his chest.

March 20th & 21st.

Chill each day. Bowels freely open.

March 22nd.

8 a.m. Chill this morning. Soreness of chest gone. Pain in the back and head easier. Two passages from bowels since 4 a.m. Skin hot and dry. Pulse 90. Ordered by Dr. Latimer.

℞. Quinia Sulph gr iii ter die.

9 p.m. Pulse normal. Skin moist and cool. Complains of irritable stomach. No passage from bowel since morning.

March 23rd.

8 a.m. Examined by Prof. Donaldson. Diagnosis. Intermittent fever. Order.

℞. Quinia Sulph gr v ter die.

8 p.m. Feels a little better than he did this

morning. Pulse and temperature normal. Six passages from bowel to day. Stomach no longer irritable. Has a slight sore throat this evening.

March 24th.

8 A.M. Patient much worse. Pulse 76, thermometric heat 100°F. Six passages last night.
8 P.M. Pulse 77. Temperature 102°F. No passage to day.

March 25th.

8 A.M. Pulse 84. Temperature 100°F. Had cold sweat last night.
8 P.M. Pulse 80. Temperature 104°F. Says he passes very little urine.

March 26th.

8 A.M. Pulse 88. Temperature 104°F. Bowels

freely open last night.

March 27th.

11 A.M. Diagnosis changed to Typhus fever by Prof Donaldson. Order

℞. Acid Hydrochloric gtts XV

S. Every Three hours.

Diet,- three pints of milk, half-pint of strong beef-tea, and Three ounce of brandy, daily.

Remove the patient to the tent.

March 28th.

8 A.M. Patient much worse. Countenance livid. Lips dry. Tongue and teeth covered with dirty brown sordes. Maculae exhibited on the abdomen. Pulse 102. Bowels constipated.

7 P.M. Slight delirium. Pulse 140 and very weak.

March 29th.

8 A.M. Delirious last night; mind clear this morning.

10 A.M. Pulse imperceptible. Extremities cold. Give stimulants very freely.

11½ A.M. A shade better. Pulse 120, very weak. order, brandy, half-ounce every two hours, beef-tea alternate hours.

6½ P.M. Much better. Pulse 120, stronger. Respirations 42. He in a profuse perspiration.

March 30th.

8 A.M. Pulse 110. Respirations 40. Skin moist. Passes his urine involuntarily.

6½ P.M. Pulse 112. Respirations 35.

March 31st.

9 A.M. Appears decidedly better this morning. Slept very well last night. Pulse 104. Respirations 32. Has had no passage from bowels for several days.

6h P.M. Pulse 90. Respirations 32. Has slept a great deal during the day. Can retain his urine now.

April 1st.

8½ A.M. Pulse 100. Respirations 32. Slept well last night. Has had no passage from his bowels since his removal to the tent.

6h P.M. Pulse 92. Respirations 32. Temperature 100°F. Complains of pain in his left side on taking a long breath.

April 2nd.

7 A.M. Pulse 90. Respirations 24. Temperature 98° F. Skin moist. Did not sleep well last night. Has a bed sore on the right hip. Still complains of pain in his side. Order. Hypodermic injection of Morphia.

7 P.M. Pulse 88. Temperature 98° F.

April 3rd.

9 A.M. Pulse 86. Respirations 24. Temperature 98° F. Pain in side much less. Slept tolerably well last night. Eyes are clear. Tongue clear on the edges but slightly coated in the center. Order. Stop the acid and give solid food.

April 4th

12 M. Pulse. Respirations. and Temperature.

normal. Fever broken.

April 8th.

Tongue clear. Ecchymoses gone. No fever.

Order patient back to his wards.

Case 2nd.

Johanna McDonald, age 24; was admitted into the Infirmary as a servant about Feb 1st of March. Had not been exposed to any disease previous to her admission.

April 1st.

Was taken yesterday with pain in her head and limbs. This morning, her tongue is coated. Pulse 104. Respirations 32. Temperature 104° F. Suffers from nausea. Bowels constipated. Took a dose of oil yesterday and another to day, both operated.

April 2nd.

Patient in about the same condition as on yesterday. Ordered by Prof Donaldson.-

℞. Soda Bicarb ℥ij
Potass Chlor ℥j
Fr. Gentian Co ℥j
Aqua ℥x M. Ft. Sol.
S. Teaspoonful three times a day.

April 4th.

8 P.M. Patient worse. Macules very abundant. Breathing hot and labored. Tongue not much coated. Pulse 124. Respirations 22. Temperature 103° F. She is very restless. Says she has not had a passage from her bowels since 1st inst. No pain in the head except when she coughs.

April 5th.

8 P.M. Patient very restless. Pulse 120. Respirations 28. Temperature 102½.

by Prof. Donaldson. Typhus fever.

[illegible]

[illegible]

[illegible].

[illegible]:- Milk three pints, Strong beef-tea, half-

[illegible]

[illegible].

April 6th.

[illegible] Pulse [illegible]. Respirations [illegible]. Temperature

[illegible]

April 7th.

[illegible] Pulse [illegible]. Respirations 44. Temperature

[illegible]

April 8th.

[illegible] Pulse [illegible]. Respira-

tions 48. Temperature 102.4.

[illegible]

8 A.M. Patient tolerably comfortable. Feels better to-day. Pulse 116. Respirations 56. Temperature 102° F. Has a slight cough.

[illegible] 11th.

8 A.M. Pulse 112. Respirations [illegible]. Temperature 101½° F. Bowels twice moved to-day.

April 12th.

8 A.M. Patient [illegible]. Pulse [illegible]. Respirations 40. Temperature 101° F.

April 13th.

8 A.M. Pulse [illegible]. Pulse 10[illegible]. Respirations 40. Temperature [illegible] F.

April 14th.

10 A.M. Patient [illegible] [illegible] [illegible] [illegible] [illegible].

8 P.M. Patient restless. Hand dry & hot. Pulse 110.
Respirations 22. Temperature [illegible].

April 15th.

9 A.M. Pulse 100. Respirations 22. Temperature normal. Eruption disappearing. Tongue still coated.

April 17th.

9 A.M. Pulse 80. Tongue, Respirations & temperature normal. Patient sleeps well.

April 20th.

9 A.M. Eruption entirely gone. Eyes clear. Tongue clean in the centre but still coated towards the edges. Complaining of pain in the [illegible] & [illegible]. Skin cool and soft. Pulse 85. Respirations 18.
Scales passing from the hands & [illegible].

April 21st.

[illegible] respiration and temperature normal. Skin [illegible].

Case 3rd.

May 20th, 1861.

[illegible]

Sullivan, aet 52; admitted May 18th.

Had been in the house with phthisis for [illegible]

[illegible] Left eight days ground [illegible]

[illegible] to his ship. [illegible] days. [illegible]

[illegible] pain in his head and limbs,

with which he is now suffering.

Treatment, by Mr. Davidson:- [illegible] pro-

[illegible] during the day, [illegible]

food, and [illegible] at bed time.

May 21st.

Mem. [illegible] pain [illegible] this

in head and limbs easier. Slept well

last night. Had one passage from bowels

[illegible]

May 22nd.

[illegible] Pulse [illegible]. Respiration [illegible]. Eyes injected. [illegible] tongue [illegible] dry brown [illegible]. Skin [illegible]. [illegible] delirium. [illegible] [illegible]. Urine [illegible] albumen [illegible] Treatment:- [illegible]

℞. Acid Hydrochlor gtts xx every [illegible] hours.

Sub:- Same as in the other two cases.

May 23rd.

[illegible] Pulse [illegible]. Respiration 28. [illegible]. Skin [illegible]. Eyes [illegible]. [illegible]

direction. Commence the [illegible]
[illegible] with [illegible]. [illegible]
very last night.

6 P.M. Patient sinking rapidly. [illegible] imperceptible. Respiration [illegible], long and labored. Skin hot and [illegible]. [illegible] rattling of effusion. Eyes [illegible] and fixed. Expression [illegible] and [illegible] just as he expires.

May 24th.

Died this a.m. 3 o'clock yesterday.

AN

Inaugural Dissertation

ON

The Progress of Medicine

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

William L. Beckham

Of

Virginia

Session of 1867 & 68

"The Progress of Medicine"

"Its claims to Scientific"

When we look at the limited knowledge of medicine, possessed at about the time of Galen; well may we without vanity, congratulate ourselves that we live in the age in which we do. Far be it from any intention of ours to detract from the glory of that great and noble man - he is justly entitled to all the praise which his cotemporaries and posterity unite in according him. Indeed it is almost as difficult to realize his great proficiency in the "healing art," considering the remoteness of the age, in which he lived and consequently the inadequate means of gaining medical knowledge; as it is in regard to the practice of medicine in his day and our own. But of course this lat-

-ter difference will be far less astounding when, (instead of comparing the two systems without regard to time), we recollect the many centuries that have elapsed since Galens death; and we might at first be led to the error of supposing that the difference is not so much after all - that it does not equal the expenditure of time; if we may be par-doned the expression. But our minds will soon be freed from this error when we are brought to realize the many difficul-ties that beset the path of scientific pursuit - how prone men are to cling to plausible theories for fear of getting others in their stead that are less so, (and this is doubtless right when they are gov-erned by proper motives) - How large a proportion of men there have been in all

ages whose, real or imaginary, interest it is, pecuniary and otherwise, that truth should not be made manifest, "loving darkness rather than light, because their deeds are evil" do all that lies in their power to stifle and suppress its luminous rays - and how many men there are - and even have been - who, notwithstanding they are actuated by the most sincere desire for this most precious of all things, look for it in a wrong way, or in a number of wrong ways; the chief of which, perhaps, is that they expect it to harmonize with some preconceived theory, originating in their own brains; and if it does not, they reject and condemn it, as long as they possibly can. And all these among

the more intelligent portion of the human race. Now truth is most beautifully simple, <u>wherever</u> and <u>whenever</u> found

Let us look at a few of the important advances that have occured in the medical science, since the day to which we have alluded.

In the first place, we will notice the radical error held previous to Galens discovery, that the arteries contained air — hence the origin of the name — He discovered that they contain blood. His argument was this viz. If you cut an artery blood flows and air does not flow: therefore they <u>contain</u> <u>blood</u> and <u>not</u> air, as was supposed. A very plain and conclusive argument.

As late as the fifteenth century it was thought that the Septum between the double heart was perforated, and consequently that the blood passed immediately through, from one side to the other. About this time this theory was abandoned. They knew that the heart was the great centre of the blood, and that the blood got from one side to the other in some manner, and so they thought it best to make it pass immediately through, in order to substantiate their theories. And in the same way many other theories of greater or less plausibility must be true; as if intended to the support of certain "Ipse Dixits", whether true or not in themselves. Between this date (the fifteenth century)

and early in the 17th century several interesting facts in connection with this subject were brought to light. It was discovered that the veins contained valves, opening on the further side of the heart only. This went to prove that they could only convey blood towards the heart. Harvey [illegible] do [illegible] and [illegible] still a new fact, all bearing on the same point - thus, in the language of the present Lecturer, Prof. of Anatomy (Dr Johnstone) of the University of Aberdeen:)
"Many discoveries, not little by little one fact after another was unfolded, but all at once in the seventh century when William Harvey discovered the beautiful phenomenon of the circulation of the blood. Literally he discovered nothing - the

only fully appreciated the effect of former discoveries, and made from several disjointed facts, a practical whole."

But this appreciation was superior to and reflected far more honour upon him than any one, or even the whole of the discoveries.

The practical results, derivative from the knowledge of this fact, can hardly be sufficiently known. Knowing that the blood performed so important a part in the animal economy, that every portion passes to and from the heart every thirty seconds, that it constitutes the very life of the individual, any fact in regard to it must of necessity afford great gratification and interest, bearing its utility. But it is of inestimable value,

utility (if in no other manner), in directing the attention of the chemist first to its physiological or healthy constituents, and then to its pathological or its condition, as modified by disease. For who can estimate the value of human life? and it is only by such experiments that we are led to employ rational means, and in a rational manner, to the restoration of health, when we can; and when we cannot, at least, the mitigation of the pangs of disease. Have we give medicine in certain diseases, without being aware of its mode of action. we only know by actual experience that it acts well: but should we on that account ascribe it to any mistrious influence, except in the sense of our being ignorant of that influence

By no means - it will all be perfectly ra-
-tional, when found out; as every truth,
that has yet been found out, is so.

But - to return from our digression:
when we consider the vast number of dise-
-ses in which the blood is involved, we know
that it is of the highest importance, to the
general health of an individual; that his
blood should be in health, since it perme-
-ates every tissue of the body, and must
necessarily carry along with it, any noxious
property, that it may possess.

We see, then, the
difference between the knowledge of physiology,
at this day, and the time of the ancients,
in regard to, that very important fluid,
the blood: the depuration of which, as
we have said before, would be equivalent

to the definition of life itself. Whereas previous to Harvey's discovery, they were ignorant of the fact that the arteries contained blood, we of the present day are aware of the fact that it circulates in a most beautiful manner, throughout the entire system — we know, by chemical analysis, the different substances entering into its composition in health: the knowledge, of which fundamental fact, gives us a rational basis for the administration of medicines in many diseases. This strides have been wonderful indeed, notwithstanding the length of time that has intervened between the beginning and the end. But we find that we have extended our remarks so far, upon, this subject of, the blood, and thoughts suggested by it; that we beg leave to be per-

-mitted, to let what remarks we have made suffice for the first part of our subject viz. "The progress of medicine." This progress has been due in a great measure to experi-
-ence. It in conjunction with intellect and ardent desire for truth, has overcome all the obstacles that have been interposed to prevent its advance. It is suffice to say that the amount of other knowledge, of a medical character and of important kind, which we have acquired is vast; for in medicine, as in all other sciences, before complete; one fact after another is being constantly discovered, before which false theories vanish like darkness before
-the rising sun. We also cheerfully confess our ignorance, as regards both facts and dates. Our further design where-

-fore will be to consider briefly, and in a general or rather unmethodical manner the present status of medicine, which we will do, under the head of

"Its claims to Scienceship"

We have heard men exclaim, and we ourself have in time past been induced to believe, which gives us a reason for considering this subject; that medicine has no just claims to rank among the exact sciences. One reason, in a great many cases, for such infidelity, is doubtless, owing to the amplitude of the field which the subject involves. If you are too indolent or weakminded friend to investigate the subject, please do not deter those who would enter the lists, by any such croaking. True there are many facts connected

with medicine that have not as yet, and many more, (We venture to affirm that never will be in time unfolded; for our acquaintance with them would make us Gods instead of men. (If this is the kind of perfection that they would define as a test of scieneship, they will never obtain it; for when this is the case, medicine can prolong life eternally, which is equivolent in power to the first creation - a perfect absurdity.) This is a medical fact as much as any other - and a fact which does not conflict with its being a perfect science, so far as it has gone. It consists indeed of many sciences - and some are of such a nature, as to render it impossible to pursue their study, to anything like a great extent

before it begets, (as it were), new sciences, perfectly distinct in themselves and yet working in beautiful harmony with their mother, sister and, perhaps daughter sciences which they, in their turn do beget. Such is the peculiar beauty of truth. It never conflicts with itself. It is indeed a <u>glorious</u> beauty.

What constitutes a science? Is it composed of anything but facts arranged in a methodical manner? This is what it is. Then are not Anatomy, Physiology, Chemistry and Pathology sciences? <u>pure</u> sciences? Of cours they are. Anatomy itself may very properly be divided into several sciences; a knowledge of which is an absolute Pre-requisite for the study of the other bran-

-ches of medicine. But we find that we are using the language of Prof'r Donaldson, of the University of Maryland, as used in his introductory lecture; and we will do so farther, in quotation. Speaking of Anatomy, he says. "This prominent science, of itself, is almost a study for a lifetime; for it includes not only the coarse anatomy of the muscles, the nervous, and the other tissues, as inspected by our unaided vision; but also the intimate structure of those parts as revealed to us by artificial lenses of as high a power as have been manufactured; thus giving us an accumulation of facts that would burden the most retentive memory."

But they say if medicine is an

exact science, why happens it that in many diseases plans of treatment are followed by different practitioners that are diametrically antagonistic - the one to the other? We assert that this can never be the case where there are intelligent, rational practitioners - never - except when quacks and ignorant men are concerned - in reality; although it must be evident, to even the most casual observer, when he recollects how frequently it is the case, that diseases bearing a like name are totally unalike in nature and vice versa - and with what rapidity at times a disease changes its essential nature, that there is the greatest room in the world for apparent discrepancies, in this respect. In this manner a disease, which, at the

present moment, by both the rational and sensible symptoms, may require depletion - the next may demand stimulation.
Dr Watson, very aptly, refers to these sources of error, as a warning to physicians; that they cannot be too guarded in condemning the treatment pursued by their fellows.

We might, perhaps say a good deal more in connection with this subject, but with the hope that we have already said enough; we beg leave to submit it as our thesis.

William L. Beckham

[illegible]

[illegible]

[illegible]

Of the

[illegible]

Of

[illegible]

[illegible]

[illegible]

Dick of Medicine

[illegible]

[illegible]

Of

[illegible]

[illegible]

[illegible]

-1885-

Typhoid Fever

Typhoid or enteric fever is a disease well distinguished from typhus fever in many of its clinical features but mainly by the tendency which it displays to the engagement of the intestinal tract in a specific form of secondary lesion.

Typhoid fever is essentially a disease of continued state, insidious in its mode of invasion, extending over a period that may be in general defined as between three weeks and three months and occasionally and indeed under certain circumstances commonly exhibiting a division into two separate stages with a well marked interval, partially or wholly apyrexial, of one or more days, or it may be of one or several weeks' duration between them.

It is in all respects a disease of a very formidable na-

=ture, producing lesion which frequently impair vital organs, inducing organic changes of a permanent kind, and implicating life either immediately or remotely, in a large number of cases.

It may kill in the acute stage by the force of the fever exhausting the system, by perforation of the peritoneum and its consequences, by sloughing of the intestine itself, by hemorrhage, wasting, and protracted diarrhoea or finally by its extraordinary powers of calling into play certain dyscrasiae previously dormant in the system.

History — By the history of Typhoid Fever here I mean what may be called the Natural History, an account of the successive investigations which have led to our actual knowledge of the Disease. In order to render this at all complete, it would be necessary to go into the History of the entire subject

of Continued Fever, a subject more extensive and more complicated yet perhaps than any other in the domain of Medical Science.

Neither the design nor the character of this Thesis render it necessary for me to do so. I shall content myself with touching simply a few of the more salient points of its History.

The character of Typhoid Fever, its symptoms its lesions, its causes &c were first studied by the Physicians of Europe. The first description of its pathological lesions, at all complete and satisfactory, was contained in the Work of Prof Chatillet in 1844. But it is to the great Work of Louis, that we are indebted for the first complete and comprehensive description of Typhoid Fever a description so complete and so comprehensive that the labors of subsequent observers have hardly ad=

= ded to its materials, or modified its properties to any appreciable extent.

The most important publications made in this country upon the subject are those of Drs Pitcher, Smith, Hale, Jackson, and Ferlandez.

<u>Mode of Accg.</u> There is a good deal of difference in different cases. Typhoid Fever, so far as the suddenness or violence of the seizure is concerned. There is no other acute disease perhaps, in which the attack is more frequently slow and gradual than in this. In many cases it is quite impossible for the patient to fix with any accuracy upon the day when his fever commenced, and again we frequently find many of our patients unable to tell us what their sickness consists of. — He could tell us that for several days he had

for a while enjoyed his accustomed good health. He may have made quite a considerable expenditure of bodily labor, or mental anxiety or perhaps an unusually late hour. He has had labor either in mind or body. He may have slight pains in the head or in the back and limbs with pulsating sensations. At the same time he may have had light chills - alternating with heat - He may have been also subject to loss of appetite, with a coated tongue, and dry or clammy state of the mouth. The expression of the countenance at times has been such that the mind of a person in different or opposite, He may have moderate headache with some pain in the abdomen, This condition of things may continue for more than a week, sometimes it continues for

two or three weeks even with but slight change from day to day. The disease attacks in such a gradual manner that we have [illegible] what day to fix its commencement.

There is some difficulty of [illegible] in ascertaining the commencement in cases of typhoid fever than in any other acute disease.

Symptoms — Febrile symptoms — Nervous symptoms — Gastric symptoms.

These are generally [illegible] but in many cases typhoid fever is ushered in by chills. Following the chills, signs of inflammation in the intestines, where these are injured, there is also a lancinating pain and heat of the skin. Headache is [illegible] in different degrees, but generally it is quite [illegible]

in degree, and unequally diffused over the body. In others the morbid heat is high and burning and at any period, very unequally distributed. In typhoid fever it is not uncommon to see the head and trunk excessively hot, while the extremities are cool, even natural. In other cases the extremities will be quite hot, while the body is but moderately so. Heat in pregnancy, fixed over a cool quiet body in a diseased state, while the other parts are cool, or the other and heat in the parts come to congestion and off at the office. Chalk in the same manner. The state of the skin in regard to dryness and moisture is quite different in different fevers. In [illegible] the skin feels harsh and dry, [illegible]

had an irritation during the whole course of the fever. The breaths are as a general thing limited to a short grunt, yet in the cases recorded, but at least we have the breathing cut at night during sleep.

Pulse — The frequency of the pulse, during the whole course of the disease, is said to be much below usual, as a rule.

As a general rule the frequency of the pulse is of a further to be considered, yet in Scarlet we find it more frequent in females than in males —

Thoracic Symptoms — Respiration — Nothing common in relation of the breathing, as to simply an the usual acceleration which accompanies febrile excitement. Under these circumstances we have a marked and peculiar cough

in the breathing, the high grade of the pneumonia, when we have delirium, the respiration becomes irregular, noisy, and heaving — the cough is not very common in the second stage, where there is extensive secondary disease of the lungs, at other times it is accompanied by very audible distension of the abdominal cavities

Coughs — In quite a large number of cases we have a slight cough usually commencing between the fifth and fifteenth day of the pneumonia. The sputa usually small in quantity, some times bracinst and colorless, but at other times bloody from an admixture with blood from the nares, and at other times rusty from a complication of pneumonitis

Physical signs — the note on top of the sternum on a dry tympanitic or hollow chorous —

The in many cases is very loud and heard over the whole chest, it appears early in the disease. Later in the disease, especially near the close of the fatal cases there appears a circumscribed crepitous rhonchus with other physical signs of pneumonia. In many of the fatal cases there is considerable congestion of the most dependent portions of the chest.

Nervous Symptoms — Headache is among the most constant symptoms of this fever, indeed I have never seen a case where it did not exist. It is as common an accompaniment of mild as it is of severe cases. The pain in many cases is the first thing which awakes the attention of the patient and marks the formal access of the fever. This pain is

most frequently first on rising in the morning, causing making its appearance about the third or fourth day. Its duration is various; most commonly lasting for eight or ten days. The character of this jaundice is a dark hazy yellow, in a few cases I have seen it intense causing great distress. It occupies the forehead and the temples, but it sometimes covers the entire head. — Pains in the Back and Limbs. — In many cases the headache is attended with pains in the Back and Limbs, they are most distressing in the Legs and Arms.

<u>State of the Mind</u> — Among the most constant symptoms of Typhoid Fever is mental lassitude. The patient is sometimes irritable, but more frequently listless and indifferent. He sleeps

it difficult to fix his attention [illegible] subject. This condition of the mind may last through the entire course of the fever. In some cases it is either lost in delirium or stupor. The delirium of typhoid is usually of that kind in which the mind has been affected.

Skin &c. — The surface of the countenance is generally slightly tinged with disease, in cases of moderate severity it is dull, both and vacant. The Eye is heavy and languid.

State of the mind — Amongst the alterations in the functions of the brain are most common are dizziness, ringing in the ears, and dimness of hearing &c. The sense of taste, as might be expected from the state

of the tongue and the legs of affected, is dull or depressed.

State of the Bowels =

Irregular jerkings or contractions of certain muscles occur in most cases of epilepsy. The most common are those of the fingers and wrist to which the brain portion of hydrophobia has been applied. Other kinds affect the muscles of the face or eyes of the chorea or convulsive tic. They are usually appear about the last taxing the disease. They are more common in some than in mild attacks.

Digestive and abdominal symptoms.

The tongue is usually coated with a light fur, and if not at most attack is in health. In mild cases of the disease, the tongue is least

[illegible]

[illegible]

[illegible]

[illegible]

Again we have the tongue with a light yellow coat [illegible] gradually becoming dry and brown in a day or two. The redness and red of the tip and edges of the tongue [illegible] face [illegible]

Appetite and Thirst

The [illegible] about [illegible] about from the beginning [illegible]

[illegible]

State of the Bowels

Amongst the most frequent characteristic symptoms of Lightcliff in Diarrhoea the great rule is not numerical

found in long continued [illegible] [illegible]
[illegible] least so in those of an opposite
character. When the [illegible] is [illegible]
is frequently [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
of [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
place from the bowels.

Abdominal Pain

Pain in the abdomen [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] of the [illegible] [illegible] to the [illegible]
of the [illegible] [illegible] [illegible] [illegible]

[illegible] the whole abdomen, but its most [illegible]
[illegible] in the iliac region [illegible]
[illegible] and [illegible] the [illegible]
in many cases constitute [illegible]
[illegible] [illegible]
[illegible] the [illegible]
[illegible]

The [illegible] distribution of the abdomen is
a very common and [illegible] [illegible]
about characteristic [illegible] [illegible]
[illegible] The degree and frequency of
the [illegible] and [illegible]
with which it is often affected, are [illegible]
the most important [illegible] to the [illegible]
[illegible] of the [illegible], [illegible] [illegible]
are [illegible] [illegible] [illegible]
[illegible] in the abdomen by [illegible], [illegible]

is effusion marked over the region of the carcinoma. Amongst the other symptoms of the typhoid fever may be mentioned emaciation, Epistaxis, and Cutaneous Eruption.

In the early stages of typhoid fever we have [illegible] and gradually [illegible] but not generally well marked till the second week of the fever.

Epistaxis is quite common in typhoid fever, it may occur at any stage of the disease, but it is not [illegible] the [illegible] at the first stage of the disease.

Cutaneous Eruption —

The most frequent and characteristic eruption upon the skin consists in

[illegible]

[illegible] about as large as the head of a pin, and [illegible]

[illegible]

eruption is general at Kinnowall

[illegible]

[illegible] The usual [illegible]

[illegible]

Post mortem Lesions

Heart and Aorta – The most common

alterations of the Heart [illegible]
tion of the [illegible]
[illegible]
in the [illegible]
The most frequent alteration in
the Blood is a diminution of
its fibrin. [illegible] The most
common change in this organ consists
in [illegible] serous effusion between
the arachnoid and "Pia Mater."
[illegible] vascularity [illegible]
[illegible] of the [illegible]
and injections [illegible]
the [illegible]
[illegible] of this organ [illegible]
[illegible] common [illegible] consist of [illegible]
[illegible]

[illegible]

[illegible]

[illegible]

of the small intestines. This lesion [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

ing a small number of tubercles

[illegible]

[illegible]

consists in alterations differing some-

[illegible]

[illegible]

which these bodies are found varies with

the duration of the disease, with the distance

[illegible] plates themselves from the Heart-
valves, and with other circumstances
[illegible]

Fat. Intestines —
There are two attributes in the
[illegible] intestines connected with it —
Fat. There are the distinction
plain [illegible] — Different
[illegible] constant change in this
[illegible] is any mutation or change.

Time — [illegible]
[illegible]
[illegible]
Lacteals. Salivary. Glands. Urin-
[illegible]
[illegible] whereby consi-
[illegible] Conclusion — A decided

are often so pro-
fane to be liable to
respect to the contagion
of typhoid fever there is

tain, and that it frequently or
very originates spontaneously, that it
contagion or infection, is
these talismans to be true, this is one

produced within the

[illegible] in one locality, go to another in [illegible] ing, and of the residents of the latter [illegible] in contact, a greater or less number [illegible]

Duration. It is not an easy matter to terminate with accuracy the course of this [illegible] the [illegible] to thirty [illegible]

Prognosis.

[illegible] considered as a grave disease, the

[illegible]

[illegible]

[illegible]

[illegible] dred and twenty or one hundred and thirty, is an unfavorable sign. The noisy, hissing and irregular respiration is a dangerous [illegible]

[illegible]

[illegible] Delirium if occurring [illegible]

[illegible] Coma [illegible] symptoms, in proportion to their de[illegible]

[illegible]

[illegible]

[illegible] are of [illegible]

The pinched, cadaverous, Hippocratic face generally indicat[illegible]

[illegible]

[illegible]

Nevertheless the bowels are [illegible] but not [illegible]

[illegible]

[illegible]

Diagnosis

[illegible]

[illegible] in any [illegible]
other instance or a few [illegible]
It must always be taken not absolute.
The evidence upon which our verdict is
to be rendered is very circumstantial.
Notwithstanding all this cases do
occur so overlapped in character as to baf-
fle the skill of the most careful and
experienced observer; notwithstanding that
there are few diseases in Africa in
which is so well established every so in-
lain as that of Yellow Fever. There
is no other disease in any considerable de-
gree resembling it. [illegible] Yellow
with headache and pain in the back
and limbs; these pains disappearing in
a few days; the heat of skin or

[illegible]

[illegible]

[illegible]

cular debility, dulness and confusion
of intellect, passing into delirium, tinni[illegible]

[illegible]

[illegible] in the ears; rose colored erup-
tion; a dry, glutinous, cracked, red, [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Baltimore Infirmary, with acting as one of the Physicians of the Hospital.

[illegible]

[illegible]

[illegible] early part of the disease, and when we have a [illegible] [illegible] the disease, and will really tend to [illegible] the [illegible].

[illegible]

Calomel pills to be given every second hour in
[illegible] or two tablespoonful doses. Should
the tongue be dry and the skin hot and
[illegible] Castor oil should be given
[illegible] Second hour in tablespoonful doses.

[illegible]

[illegible] should be changed at least daily.
[illegible]
day with some accumulated wash, all excrementitious
matter should be removed from the room
[illegible]
[illegible]
[illegible]

AN

Inaugural Dissertation

ON

Acute Rheumatism

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Jas. B. Hall

Of

Scotland Neck N.C.

Session of 1857-8

Rheumatism

Rheumatism is inflammation of a peculiar kind. It is inflammation of the fibrous tissue, and may be found wherever that tissue is used in the body. It may attack other tissues also, as for instance the synovial membrane of a joint the inflammatory action spreading from the fibrous tissue around the joint, but in all cases it is more than probable that the fibrous tissues are first to be diseased.

Rheumatism most commonly attacks the fibrous parts around large joints the ligaments and tendons, but rheumatism sometimes occurs though it is said to be a very rare thing. The areolar tissue and synovial membrane may become inflamed and cause the formation of pus. Acute rheumatism consists of redness, swelling, heat and pain of the surrounding parts, or parts entering into the composition of the joint affected, with a

disposition to shift from one joint to another, or to the membrane of the heart. The shifting is a characteristic feature of the disease. Inflammation suddenly appears in a joint then shifting suddenly to another, and then perhaps goes back to the joint first affected. In many cases it attacks three joints without leaving the one first affected. Thus in many attacks all the large joints in the body, it most commonly

attacks the ankles, knees, hands, elbows, wrists, &c. The joints of the fingers are very frequently attacked also. The moving about from joint to joint is attended with high fever, hard white pleasing face and a profuse perspiration, all of which is calculated to weaken the patient. The tongue is covered with a thick whitish coloured fur, red at the tips and edges. The intellect is seldom affected unless the heart is involved, and

then there is violent delirium.

There is no derangement about the stomach. The bowels are not affected, no vomiting, or diarrhoea which disorders are generally found in continued fever.

The joints are entirely painful and tender, the fibrous tissues, which in a healthy state have very little sensibility, become very painful. The pain is increased by pressure or by the movements of the joint, the patient is entirely

he plans they can move the joint or rather their limbs but the pain is so excessive that they will not attempt to do so. The pain is more constant than swelling, and the swelling more so than redness.

Two remedies have been made by Dr Chambers namely, the fomes or diffused rheumatism and synovial rheumatism.

For the difference, the inflammation commences around the joint but not in it, the ligaments

and sometimes the muscles are attacked. There is at first not much redness or swelling, but after the pain has continued for some time the parts are puffed; the redness which there is present is readily relieved by poultices. Synovial rheumatism shows itself more frequently in the knee and the pain does not last long before there is some degree of swelling.

The most prominent cause of rheumatism is exposure to cold damp atmosphere this is proving the reason that the

poor and laboring class of people are affected with this disease and because they have ill sufficient nourishment. Acute rheumatism occurs generally in youth but many cases have been seen in which it occurred in children pre-pubertate years of age.

The most important feature of acute rheumatism is the tendency it has to attack the heart. Endocarditis occurs in a great many cases. The inflammation generally attacks

the ~~the~~ membrane lining the left side of the heart. Pericarditis does not occur as frequently as Endocarditis.

Pathologists have agreed that the cause of Rheumatism is, a morbid state of the blood, but what that morbid state is dependent upon, seems to be uncertain, some suppose it to be uric acid, but after the analysis of the blood ~~and~~ in a large number of cases it seems that this principle has not been found.

Others — and it is said a majority —

hold that this morbid state of the blood is owing to the presence of lactic acid, sufficient proofs however have not been shown it make it a certainty. Whatever this morbid principle may be, it circulates in the blood and gives rise to this disease. I have said that one of the causes seems to come from exposure to cold, and probably it does, but some people are undoubtedly predisposed to rheumatism, and being exposed to

a cold damp atmosphere are more liable to take it. Others submit themselves to the same influences with perfect impunity. Age has a decided influence over this disease it rarely occurs under fifteen years of age, and does not generally make its appearance for the first time — over thirty five years of age. The disease prevails at all times of the year and in all temperate climates, it is rare in the tropics and very cold climates.

In the diagnosis of Rheumatism it is frequently confounded with gout. The symptoms of acute Rheumatism are so well known that there ought to be no mistake made unless it is confined to one joint then it is likely to be mistaken for gout. The occurrence of endocarditis or pericarditis, the age of the patient and the former attack of Rheumatism should be taken into consideration, and other signs better known to a practitioner than to me.

The disease is rarely fatal unless the heart is implicated, and then a greater number of cases are not fatal. The simple disease without complications is of course serious because it may give rise to endocarditis, and that may cause irreparable damage to the heart.

There is scarcely ever any immediate danger with endocarditis, as the patient may live several years without serious inconvenience. Acute articular rheumatism scarcely ever ends in the chronic form.

The treatment of acute rheumatism has been for years so varied that it certainly can't be said to have a panacea. The following remedies are among some that are used and have been years ago. Opium, quinia, lead and general blood letting, calomel, colchicum purging, nitrate of potassa, and nitrous acid. At later days the alkaline treatment is practiced. The tartrate and bicarbonate of soda and potassa, as Rochelle

salts are the remedies principally used.

What is most desired in the treatment is something that will arrest the morbid matter — or the production of the morbid matter in the blood — and it has been claimed that the alkaline treatment has this effect.

If the principle be lactic acid it is neutralized by the introduction of the alkalies, and an increased secretion of urine takes place. With reference to the secretion of the urine, a saline diuretic comes in very well.

The alkaline treatment must be used especially to protect against cardiac affections and the alkali used should be given in large doses.

Fuller advises "pure cure to the drachm of the bicarbonate of soda or potassa, to be given every fortnight. The quantity thus given will neutralize the urine alkaline in twenty fourhours."

He considers the patient safe from cardiac disease as soon as the urine becomes acid, and remains so, as long as their condition is maintained.

The effects of the alkali may be diminished by reducing the dose to about-three or three in the twenty four hours. The nitrate of potassa or colchicum in small doses may be given to produce narcotic effect, or the acetate of ammonia may be given. Tartrate of potassa and soda - it is said - is not as efficient as the bicarbonate because it must be used longer to produce alkalinity of the urine. It is beneficial after the urine is made alkaline by the bicarbonate.

I have heard of an acute attack of Dr. [illegible] being treated by an effervescing bath, dissolve in twenty four gallons of water two pounds of bicarbonate of potassa and one pound of the nitrate. Bleeding in my opinion should be used only in plethoric patients, and when the febrile movement is ~~tense~~ intense. Opium very often is of gr at benefit and is used to relieve pain, therefore it should be given in doses according to the amount of pain.

The joints that is affected should be wrapped in flannel or wool, which will keep the more or less pressure. The bowels of the system ought not to be disturbed, on the other hand tonics should be given, quinine is very valuable. Good plain wholesome food should be given, but not in such quantities as will overload the stomach and prevent digestion. Diluents ought to be used a good deal. Lemon juice has been used much in large quantities, recently.

A good deal of ~~pro~~ relief is obtained by "methodic friction", use some medicated matter, the joints is to be rubbed very lightly at first as it is very tender & after a while even harder pressure may be used, and for several hours after the affected parts will be much easier. Large blisters around or near the affected parts has been also used, this is Dr. Lanier's treatment and he says "it has a curative effect on Endocarditis."

Jas. B. Hall

AN

Inaugural Dissertation

ON

Anterior Lumbar Spinal

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By

R. Carrasa Smith.

Of

North Carolina.

Session of 1867 1868 18

About eighty years ago Prof. R. Smith attached great importance to suspension, and in consequence introduced into use a Posterior Splint, which was made of rods of iron, with pieces of cork, according in thickness to the limb, and when well applied, gave fairly good results. This apparatus was then considered very valuable in the treatment of fractures of the lower extremities. Some years after, the eminent Surgeon invented another apparatus, known as the "Hodgen Suspensory Splint", which was excellent as this apparatus in treatment of hip injuries. This is applied by first screwing an iron hooking into the ceiling, over the bed of the

patient, perpendicularly over the middle of the shin. A cord the same size of the cord of the splint, passes over the pulley and is secured through a small iron hook, by which slipping up or down, we can easily elevate or depress the limb. The eccentric pressure prevents the weight of the limb from causing it to slip. The simple depending cord has a loop at its end about two feet above the limb. Through this another cord about five feet long, passes and hangs double from the loop, by its bend. Each end has a hook attached to it which is made of wire smaller than that of the splint. The splint is made of wire about the size of a "No 10" bougie, of

the pine was smaller it would be apt to spring and crack. The pieces of pine are four feet three at right angles, at each extremity being however three inches and a half wide at its upper extremity, and two and three-fourths at its lower. It should be sufficient in length to extend from a point a little above the anterior spinous process of the ilium, to an inch beyond the toes when the leg, foot and thigh are extended. Generally three feet and eight inches is long enough, tho' a little excess of length is unimportant. The side pieces are connected by curved cross-pieces, at distances of about five inches firmly clinched and soldered upon them and in loops in this centre for the att-

-achment of the hooks. The surgeon can bend the wire to suit the case in which he wishes to apply. The lower angle at the ankle is about 120°, which secures an easy fastening of the foot. The angle at the knee is very obtuse, about 160°, and that at the hip is nearly the same. The angle should be about five inches, at the ankle, from the extremity; and that at the hip seven. The middle angle varies towards to the knee, the angle have to be varied to suit the fracture. The wire is to be over tightly wrapped with a soothing bandage, after which it is ready to be applied. The hooks of the extending cord are to be attached

to the loads in the cross-bars. The indications in fractures of the lower extremities are. 1st To furnish a surface of support which shall be accurately, and permanently applied — surface and form of the limb which rests in it — (2d.) To so adapt the surface of support as that the limb, resting into it, shall maintain its place by its own weight without the necessity of bandages here and there, to secure it to the rigid portions of the apparatus. 3d. To make the limb obedient to all the movements manageable, of the trunk, so that the upper fragment may not be jostled upon the lower, as contrasted in relation to it by the movements of the trunk. 4th. To obviate the contact

action of the muscles in the employment of an extending force, uniform in its action, easily graduated and not requiring the application of bands to the ankle. 5th.

So to arrange the supports that in compound fractures we may have free access to the seat of injury without removing any of the essential supports of the limb. 6th. To effect these objects by an apparatus, simple in construction, capable of being easily procured, easy of application, and requiring scarcely a trifling expense. Now to accomplish all this, there is no apparatus more efficient, easier of application, and that can give more comfort, than

the one under consideration. It has many advantages over Desault's apparatus and its various modifications, and will, no doubt, supersede it. Many of the Surgeons of Paris doubt the utility and advantages of this apparatus, and in consequence do not use it, for the simple reason that they know that it is the best apparatus known, in treatment of fractures of the lower extremities, and fear, should it be brought into use there, it might lessen the sale of their very much inferior. It is my opinion that they could not have so many doubt the Bandageists, had they resort to this efficient apparatus. The distinguished professors of Surgery at the University of Pa.,

who has experienced the value of this apparatus; in his course of lectures, devotes an entire lecture to the mechanism, application and advantages of it; and he (Dr James L. Cabell) says that a hardtwo makes extension and counter-extension better than any other.

This splint is applied by placing it along the surface of the limb (wrapped in a muslin bandage as directed), the foot resting an inch outside from the inside, the middle angle corresponding exactly to the knee. A compress may be placed on the inside and one under the tip extremity of the splint. Pass a piece of net-bandage, long enough to embrace the limb and overlap.

includes the foot and even the spinal as well as
membrane bath. Let another of the same kind
be placed around the ankle, another beneath
the knee, and a fourth above the knee, also a
fifth which is passed around the trunk
near the hip. The hooks being attached to
the loops of the strap-bars of the splint, instead
the limb may be elevated so as to facilitate
the application of the bandage. In case of
fracture of the middle of the shaft of the
femur, the upper hook should be attached
over the seat of fracture, the other a little
above the middle of the leg. The hooks can be
changed as the position of the limb may require. The
bandage should be applied by bracing the limb
steadily supported by assistants, and the surgeon

commences by making three or four turns around the foot towards, being carried not to press it against the foot. The "figure of Eight" turn should be made around the ankle and foot, and then carry the roller upward, reversing, when necessary to make pressure adaptation, and care being taken not to press too firmly against the foot. When the leg is reached a few spica turns are to be made obliquely through the groin and around the pelvis, finishing with two direct turns around the pelvis. It is better to cover the whole under surface of the bandage with batch, this prevents slipping of the bandage, and secures a uniform support. Counter-tension is

made by dipping of cold, and Immobilization by the inertia of the body. To prevent slipping of limb toward foot of bed, blocks may be placed across the foot of the bed. The limb should be sufficiently elevated to prevent the heel touching the bed. Being confined in this way, the patient is allowed to change his position, viz. while he healed with Thomson's side splint or Hilton. This pleasure and comfort he is deprived of; and is forced to keep the leg in the same position at the while. In the language of Dr Cabell "the Sandeman splint is applied to a patient who has been confined in Desault's or Thomson's splint for such active relief from

pain'. There was only one objection raised to this apparatus, and that is the pressure upon the head of the fibula, and this can be very easily remedied by interposing a compress. I have had opportunity of seeing this apparatus applied, many times, during the late war, in the hospitals in Washington, for the cure of well marked aneurism, which Dr Brockett said go beneath a small extraordinary depth, such as passing under Poupart's ligament, which was wounded, by bad bandaging the left thigh at about the junction of middle third with upper, leaving the natural pulsation, and that of circulation. The bone of right-thigh was

between, and that of the left cheekbone.
The surgeon then in charge, Dr. J. G. Dorsey of Md., probed the wound carefully, but did not find the ball.
There was an wound of soft parts of right thigh, externally; there was some swelling, suppuration of the trunk, crepitus was very distinct. The lower fragment was drawn to the inner side, and rotated afterwards.
The amputation was performed in this case, by Dr. Geo. A. Ottman, who accomplished the object with great skill. It is expected to state that the case had been examined by some one of the surgeons of the field, who applied the long straight splint (Physic's), which

was removed very soon after his entrance into the St. L. Hospital. The patient began to improve from the time of the application of the Anesthesia Splint, and seemed to be at perfect ease all the while, suffered no pain, required no anodyne to make him rest, but slept as quietly as an infant. In four weeks he could walk with the assistance of crutches, and in a short while was able to leave for his home; & on some time on his return to the Army and he was in good health and perfectly well, no signs of fracture was visible, but he seemed as perfect as before injury. I now the

same apparatus applied in many other cases, with the same success; but in one case at the hospital mentioned, in which this splint was applied, that failed to secure. Since the commencement of the present session, I have seen this apparatus applied, with great success. The case in which it was applied was a man, labourer, who had a compound fracture of tibia and fibula, the latter bone was supposed to be a little comminuted; it was caused by direct violence. In this case there was great inflammation and but little displacement. He improved very fast and on the 26th of October, this first ap-

heavance being on the 13th of October) he was brought before the cap again, at which time he was doing admirably well, the limb was slightly swollen when the Collins was passing. I saw him again on the 16th of November, and he was still improving, and on the fourth of December walked with a cane, and in a few days returned to his home. He had a perfect joint, no sign of that ever having been fractured, was serviceable. [illegible] I [illegible] told me that no one could be again more comfortable on crutches than he, particularly after being confined in Leslie's long splint, as in fracture-box.

By the whole days an eminent French surgeon, we over that the application of Professor Smith's splint possesses the following advantages, over every other system employed in the treatment of fractures of the lower extremities. 1st. The extremities of the fragments are maintained in perfect elevation without the exercise of any constriction upon the limb. 2d. For cases of extensive displacement of the fragments, extension is easily accomplished, by the vertical rods, of the splint, and the reduction accomplished by the splint d'Assini attached to the apparatus, and this without any dragging. 3d. The method of suspension is exceedingly eco-

-venient for the employment of irrigation and for the keeping of all the vessels of the member, upon which we may frequent all the operations necessary without disturbing the application. 4th. The vessel being uncovered, is exempt from pressure, and from the acute pain which, in the use of other covers so often embarrass the surgeon. 5th. The patient can change his position and raise himself in bed without inconvenience. 6th. Finally, what is not least in importance, the application of Arnica is the only one which in, even the most severe and complicated fractures, allows the patient if he possessed to any distance, without exposing him to any danger, or causing the least pain

I have seen this apparatus [illegible] in case of Coxitis, and it gave [illegible] from all pain, which was [illegible] when the splint was removed. A man now in the Infirmary, who has been suffering with this disease some months, what limb now rests in this apparatus, and from which limb the splint has been removed several times, for the purpose of facilitating an examination of the diseased part, says, that he would not be without this apparatus for the world, that his life would be one of continued pain and trouble, were he deprived of it.

This apparatus is not only ingenious

its value at home, but abroad. In a recent letter from Dr Paget of London to Professor Pirrie, he states that this application is increasing in value daily and, that he continues to use it with great success.

It is true that the unsparing cases of application of this Plant, with its success, which I could give, would hardly permit me to do. Nor me to do this application justice in the little invisibility, were I to write a volume; consequently I submit this feeble effort to your consideration.

AN

Inaugural Dissertation

ON

Mental Agency in the Treatment of Disease

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

P. Lambert Gulaney

of

Maryland

Session of 1867 & 1868

ntal agency in the treatment of disease

Of the existence of an immaterial principle distinct from the frame which it inhabits. I presume few if any of us entertain a doubt. That mere brute matter, by any possible arrangement of its particles should acquire the power of thinking and feeling is a supposition perfectly inconsistent with the laws of nature. And

None but those who have become bewildered in the labyrinths of a false philosophy are likely to adopt or support it. The belief of a soul within us, like that of a divinity above us, is the result of the mental organization of our species. But how this immaterial principle is connected with the machinery that keeps it in motion is not known

and I think it highly probable never will be on this side of the grave, but one fact one do know that it is capable by an excessive, deficient, or deranged influence, of throwing the machinery itself into disorder, is proved by abundant experience. For instance a few examples; What physician is ignorant that violent anger may give

rise to apoplexy; that sudden emotions whether of joy or grief may suspend for a time if not altogether arrest the motions of the heart; that continued mental excitement is a not unfrequent cause of inflammation of the brain and mental depression, of dyspepsia, chronic hepatitis, and various other disorders of the human organism. But let us turn our eyes and see

what then is of good that may be derived from Mental agency in the treatment of diseases. Therefore if mental influence is often found among the causes of disease, may it not also be sometimes used as an instrument of cure? In this otherwise would be doing injustice to that kind order of Providence, which has instilled something that to counteract into every cup of evil.

And I think there can be no doubt that a skilful physician may often very advantageously enlist the aid of the mind against the bodily ailments of his patients. But to give a complete view of all those therapeutical means which work under the head of moral remedies, and modes of applying them greatly exceed my weak abilities. Therefore I must

Content myself by mentioning
a few of the most important
at their command. The
feelings, emotions, and passions
are perhaps those parts of
our mental constitution
which are most available
for remedial purposes. But
even of these some have an
excitant and others a depres
=ing influence. And when
brought into play therapeutically
must be made to bear upon

opposite states of the system.
Thus joy, hope, anger and
the feelings of the ludicrous,
are more or less stimulant,
and in their various grades
of intensity, produce every
degree of excitement, from
the gentle glow, up, through
the fever of successful intrigue,
to rapturous enjoyment, or the
overwhelming tumult of fierce
and sudden wrath. Grief
and fear, on the contrary,

in their diversified grades and forms, diminish the energies and depress the actions of the system, and sometimes produce fatal prostration. There are other passions of a complicated nature, which produce different and even opposite effects on the system. Thus, we have love with its joys and its hopes on the one hand, its sorrows, fears, and anxieties

on the other; jealousy and revenge, now diving with their griefs, and now intoxicated by their hateful anticipations or accomplished wishes; ambition with its exciting triumphs, and its prostrating failures, and so with numerous other modes of feeling, which variously affect the state of health. And according to my belief, they may all

be resolved into those of excitement and depression, especially such as result from the simple feelings of pure joy and grief. I think the physician should have regard to all these influences in the cure of disease. It is very true that he cannot always command them at will. He cannot prescribe them as a dose of medicine or the loss of blood. For

they are generally the occur=
=rences of opportunity, and he
must seize them as they
appear. Often do they fly
up before his steps and,
like a good sportsman he
must be prepared to take
them on the wing. There
are some cases in which
the more violent forms of
feeling may be used advan=
=tageously, especially when the
disease itself is of a quiet onset

and fugitive nature. In cases of high nervous excitement threatening convulsions, a strong impression of terror or grief will sometimes quiet the agitated nerves and compel them to peace. But a much more useful result can be obtained from the milder emotions, which are more at his command, and may be applied with less hazard.

to the patient and can be much longer sustained. For instance the supporting influence of a cheerful confident, and hopeful state of mind in consumptive diseases, has a beneficial influence on the patient in regard to his ultimate recovery. There is another important point with the physician and that is more necessary to succeed. For the

Medical practitioner who,
considering his patient as
a mere piece of deranged
machinery, enters the sick
room as he would a work-
shop, and hammers away
at the disease, and later
on account of mental infer-
ence, I have no doubt will
constantly exercise injurious
interference in his plans which
he cannot explain. It is this
that belief operates, in general,

not by an immediate influence on the system, but through the instrumentality of other principles which it brings into action. Thus, when the object of belief is of a pleasing or fearful nature, joy in the one case, and terror in the other, become the agents of the results, and in both cases, the imagination is brought into play; and awe, wonder and various other emotions lend an effective aid. Still, faith-

is at the foundation of the whole;
and I think it is to this point
that the physician is to direct his
efforts. Hence the importance
of inspiring patients with
confidence in our skill,
and wish to serve them,
this being accomplished the
physician will very often
be highly gratified at
the prompt action of his
prescriptions. But there
are also cases in which

he may advantageously resort to the active faculties of the mind as positive aids. The suspension of mental effort, after one has been long accustomed to it, leaves an individual languid, uneasy and restless. He feels the absence of excitement, takes no interest in the objects around him, becomes depressed in spirits and often a prey to hypochondriacal feelings

I think the only effective remedy in such cases is to bring the intellect again into action either in the original pursuit; or if that has lost its charms, in some other adapted to the taste of the individual. With what I have written I close the broken remarks I offer upon this very important subject: and can only say in conclusion

as Lord Byron said "What-
is world - is world - would
it - were nothing"

An Inaugural Dissertation on Malaria

Submitted to the Examination of the Provost Regents and Faculty of Physic of the University of Maryland, For the Degree of Doctor of Medicine

By

Henry J. Stone
Montgomery
Alabama

Feby. 14th 1868.

J. C. Williams, L.L.

of

Alabama

In acknowledgment of the ever active friendship and [illegible] kindness while a student of his. And in admiration of his noble character and professional skill, this thesis is most [illegible] dedicated.

[illegible]

Malaria.

[illegible] domain [illegible] exceed [illegible] than the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] and [illegible]

ty. And the views in most com-

[illegible] man [illegible], [illegible] [illegible] [illegible]

[illegible]

[illegible] latter [illegible]

[illegible] more efficacious than more a-

[illegible]

[illegible] expressing a common or gen-

[illegible] idio-miasmata [illegible]

[illegible]

[illegible] of new issues, are [illegible]

[illegible] [illegible] rable decomposi-

tion. Dr. J. H. Salisbury of Ohio

has recently introduced a

[illegible] which has attracted [illegible]

attention, and to which I will make

a passing notice. He [illegible]

his theory on a number of exper-

iments, for [illegible]

[illegible] can credit.

[illegible] connected with

[illegible] [illegible] affecting [illegible]

[illegible]

[illegible] and fear, and in study-

ing the causes and consequences of

fermentation, [illegible], decay and

other changes going on in the tissues; he was led by some suspended bodies in the atmosphere, to inquire into the cause of fevers, and [illegible] to the matter. In examining the exterior [illegible] under this disease, he found animalcules, vegetable fungi, and [illegible] coming out. Fixed [illegible] under the [illegible] microscope, [illegible] surrounding and between which, and the only [illegible] space, the [illegible]

the result. Having found this in the excretion of persons with the disease. He communicates experiments [illegible] in this [illegible] series, which he accompanies by [illegible] poisonous effluvia, and to the surfaces of which he finds this adhering. He finds it in the cryptogamic plant so common in malarious places, [illegible] paludal, or palustrine. Having [illegible] it in the [illegible] of the body, in the excretion, and in the palustrine plant, and [illegible] [illegible]

influence over the nervous mechanism of the brain. He holds that these are received into the body, where they gradually until nature becomes irritated at their presence and makes an e-- [illegible] them off, which [illegible] is seen in the result. [illegible] in [illegible], [illegible] disease. Thus the grounds for military service then [illegible] not be accepted until further ascertained.

The morbid [illegible] is [illegible] son, and by which alone it can be [illegible], [illegible] explained as

a temperature less than 60° F. though vegetable decomposition be in progress. At 80° it is often very prevalent, but seems to depend on the occurrence of frost. It seldom prevails at any [illegible] beyond the 50° of latitude, hence it would seem that the cold and humid air. It has been noticed that a certain condition of atmosphere, is not less necessary than a certain degree of cold; thus immediately under the equator this disease is seldom concentrated into at any time from the 1st, moving with the sun to the north, and the longer the duration of it, the more will be the prevalence

of the disease. In our country
where there is a regular change of
the seasons, which we have first, it
delayed until the latter part of sum-
mer, or commencement of autumn.
Moisture is the second requisite which
we have noticed, as being essential to
the production of this poison, and it
this is so, too, we have been notice-
d to be detrimental to its evolution:
thus it is that dense woods in hot
regions are favorable to disease. It has
also been noticed that a warm dry
climate with moisture, are less favorable
to the evolution of this poison, than
those where the heat and moisture are

and but partially covered. And these places have been noticed to be more healthy during heavy rains, than those of a more elevated nature.

The third and last, yet chief, for the production of malaria, is vegetable decomposition. That this is essential seems evident from all the facts, where there are vast accumulations of vegetable matter, and in the courses of tropical streams, which in their period of overflow bring down great quantities of soil loaded with vegetation and on subsiding leaves it exposed to the intense heat of the sun. The draining of lands, has often increased

arises in its neighborhood, [illegible] [illegible] [illegible] organic [illegible] [illegible] sun, various [illegible] [illegible] ed chemical reaction, and subsequent decomposition. Whole communities have often been exposed to disease, by the draining of mill-ponds and the submerging of meadows, for the purpose of increasing their fertility.

A long [illegible] [illegible] followed by an occasional spell of warm weather, [illegible] [illegible] [illegible] the formation of [illegible] [illegible] by decomposition of the vegetation, [illegible] [illegible] ment.

It is during [illegible] the [illegible]
part, that the [illegible], the [illegible],
latter part of summer is more ex-
[illegible]
part of the year. The vegetation hav-
ing run its course, and at this
time [illegible] in a [illegible] decomposi-
tion. Persons engaged in cutting
canals, and digging ditches are more
exposed to this form of disease, than
perhaps most others, it is perhaps
due to the eversion of the soil, ex-
posing the hidden particles of
vegetation to more favorable aus-
picies for decomposition. The de-
composition of [illegible] in [illegible] water,
[illegible]

gives rise to this poison.

A very interesting feature is [illegible] in the history of malaria, [illegible] "[illegible]" [illegible] circumstances. Thus we have an instance of this affinity in the case of [illegible] producing more disease. The pain of its attraction for the miasm, leads it down to the surface of the earth [illegible] to its influence. We see the banks of rivers, where the water passes in a deep channel, there is [illegible] it

[illegible] the [illegible] in [illegible]
a [illegible] [illegible] [illegible] alone work
by retaining the malaria in solution,
but when it reaches the surface
in [illegible], [illegible], [illegible]
into vapor disengages the malaria
and sets it free.

Salt marshes have been thought
to be less favorable to the production
[illegible] [illegible] [illegible] than
[illegible], [illegible] [illegible] [illegible],
to owe [illegible] in [illegible] [illegible]
perhaps to the ebbing and flowing
of the tide, carrying away the
malaria as fast as generated or the
[illegible], retaining it in a state of
[illegible], and thus [illegible] it

gases escaping into the air, than it would influence the salt brine in over the boiler. It has been ascertained that persons who live in a place on land, near the sources of exhalation, are [illegible] to the morbid action. This is seen, even more manifested in ships at sea, by many distinctions; because in the case of the latter, the [illegible] [illegible] heats them by absorbing the gases passing along its surface, and holding it in a state of retention. That greater danger would exist in the surface [illegible] the latter, in proportion [illegible] [illegible] [illegible] [illegible]

[illegible] in [illegible] of this [illegible], over what [illegible] in the have [illegible] of [illegible] contracting disease, who slept on the lower floor of a building, while [illegible] on the upper, [illegible] water.

Frogs in cold water [illegible] are known to exist near the surface [illegible] in vicinity, [illegible] semi-[illegible] [illegible]. This [illegible] [illegible] moving and [illegible] air is [illegible] [illegible]. [illegible] and hygienic laws being attended to, persons may reside in tropic regions without ever being attacked

of this poison. Hence it is recommended never to be exposed to the night air or air of marshy regions, [illegible] powers of the system are thus able to [illegible] accounts for the [illegible] of these diseases in camp life, which has been so fearfully demonstrated in the last war.

[illegible] internal [illegible] over [illegible], exclusive [illegible] which could not [illegible] [illegible]. Thus at [illegible] [illegible] [illegible], [illegible] [illegible] aspect [illegible] the [illegible] of malaria [illegible] [illegible]

from those of a low and marshy na-
ture. The influence of wind explains
it so clearly, that no doubt is left
[illegible]. This is made more
strongly evident [illegible]
intervening forest, which prevents
[illegible] coming with [illegible] in-
creased [illegible], and [illegible]
[illegible] and [illegible]
place before them, [illegible]
[illegible]. It is [illegible] of
wind with [illegible], that [illegible]
to explain why one side of a moun-
tain is more unwholesome than its
opposite side. It is to this influ-
ence that violent storms are use-
ful, in dispersing [illegible] poisons

which has collected on the strata [illegible]
[illegible] Still [illegible] in which
this exhalation can be carried, is
thought to be very [illegible]
unlike. [illegible] surrounded
on [illegible] sides by hills are necessarily very dangerous, by accumulation,
and hence concentration, and should
under all circumstances be avoided.
It has been thought that air from
which is so unwholesome to man,
serves as food for vegetation, and
thus contributes to its development.
On an opposite view it
has been thought that countries
which have a regular change of
seasons, that in the earlier part

in a high state of developement con-

[illegible]

[illegible]

[illegible]

But in non tropical districts, where

[illegible]

heat, which then add to the unwhole-

[illegible]

abundance of vegetable

[illegible] for [illegible]
The green scum which [illegible]
-ound on the surface of stagnant
ponds, is thought to be beneficial
in consuming the malaria generated
at the bottom, and thus preventing
it from escaping into the air. It is
therefore recommended, that this be
[illegible]
poison, the water being too high
[illegible]
[illegible] D [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] Taking its nourishment

[illegible] the water, it thus absorbs the veg-
[illegible] as they are
[illegible]
observing that waters inhabited
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] bed to the influence of combus-
tion, which is so universally con-
[illegible]

[illegible]

[illegible] increase the morbid action of the [illegible]

[illegible] disease can be avoided altogether by keeping fires in their [illegible] during the [illegible]

Epidemics of this class of diseases [illegible] their commencement [illegible] of the year, presenting the same physical signs, and yielding to the same treatment.

The [illegible] with uncertain. Its existence

to establish its non-existence. Virtue

adduced, seem still negative proof-

-osition could be [illegible] with [illegible]

[illegible] with the fact, that the [illegible]

is [illegible] with [illegible], and [illegible]

[illegible] thation even at great distances, though

the eye alone is unable to discover

[illegible], [illegible] the [illegible]

[illegible] scope, their presence is quite [illegible]

[illegible] distances might lead to [illegible]

[illegible] bodies, and [illegible]

[illegible]

would inevitably be the result, while

[illegible]

[illegible]. Though in the instances [illegible]

[illegible]

[illegible] moment, [illegible]

[illegible] exist at, or in the vicinity of

[illegible] instances, these can be clearly traced

to [illegible] visible causes.

[illegible] of this theory of marsh [illegible]

[illegible] that [illegible] essential [illegible]

[illegible] must

[illegible] discovered.

[illegible]

[illegible] in Cavo,

[illegible] altero [illegible] exisse in

[illegible]

[illegible] 1840 [illegible]

[illegible]

[illegible] that this [illegible]

[illegible]

[illegible] case,

[illegible]

[illegible]

[illegible]

[illegible] this the case, then [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4. H. Dancer could detect organic matter in the air of marshes [illegible]

[illegible]

[illegible] argument in favor [illegible]

[illegible]

[illegible], or [illegible];

which we thought find in decay

[illegible]

[illegible]

[illegible]

the blood by absorption, and then

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

animalcules, or vegetable fungi act

upon the [illegible], [illegible]

[illegible], which we [illegible] argument-
ed with their own notions. It is
thought however that the electrical
spectrum thought the air passage
having in act of inspiration, bring-
ing air to the air cells of the lungs,
and [illegible] particles [illegible] and
from the skin, and [illegible]
[illegible]
[illegible], which it is exposed day
and night with the saliva.

In something like of this [illegible] Stan-
[illegible] [illegible] to act
as [illegible], by diminishing air
[illegible] action. Air [illegible], [illegible]
maintained that it was electro-
galvanic [illegible], which [illegible]

his morbid action, by disturbing the electrical equilibrium. The consideration that disturbances under other circumstances does not produce disease, is a [illegible] point to [illegible]

[illegible]

[illegible] it not identical with the [illegible]

[illegible] following the [illegible]

[illegible]

11. functions of the liver, and spleen.

[illegible] is both [illegible]

[illegible] tive. [illegible]

[illegible]

[illegible] is the [illegible] remedy [illegible]

[illegible] or the latter, cin-

chona or [illegible] of [illegible]

eminent for their success and

[illegible]

[illegible]

These are found in all malarial dis-

[illegible]

poison. This has been [illegible]

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and nervous, gastric, ~~and~~ hepatic, and
systemic disorders, and neuralgia.

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[illegible]

Inhabitants of malaria [illegible]
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vollness of mind, though [illegible]
[illegible] under the well marked [illegible]
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old; and this vision is thought to
become essential to perfect health.
In submitting this essay as your
impartial adjudication, I [illegible] [illegible]
[illegible] for the energetic manner in
which you have pursued your course
of [illegible]; [illegible] [illegible] [illegible]
wishes for the continued success, and
[illegible] prosperity of your University.

AN

Inaugural Dissertation

ON

Valvular Diseases of the Heart.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Thomas John Chew,

Of

Maryland.

Session of 1865.

Valvular Diseases of the Heart.

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the charitable of

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Prognosis.

The Physician should be guarded in his statements to the patient. It is not well to frighten the patient in regard to his condition, for the state of his mind is a most important element in the treatment: remedies will be of no avail if the dread of sudden death constantly stare our patient in the face. And in

fact, according to Dr. Flint, sudden death is of rare occurrence in valvular lesions, even when we include those who perish from intercurrent diseases. Life may be prolonged almost indefinitely by observing proper care and prudence. Even Dropsy which generally denotes the approaching end is sometimes entirely relieved.

A most important part of the Physicians duty is the differential diagnosis of this class of murmurs

from those of an inorganic nature. Inorganic murmurs are always synchronous with the first sound. They are heard with greatest intensity at the base of the heart, and are seldom diffused above, & rarely ever below that point. They are generally intermittent, and irregular. Do not give rise to enlargement of the heart. Add to this that they are generally found in anemic subjects; if in addition to this the venous hum is

heard in the jugular veins, the diagnosis is still more clear.

The treatment relating to the heart in the early stages, has reference first to preventing the anatomical lesions – second to obviating the tendency to weakness of the heart.

All causes that tend to excite the circulation – all undue exposure – excessive exercise – indulgence in alcoholic stimulants – and great mental excitement should be avoided.

Hypertrophy is conservative and should

not be checked. Danger commences when dilatation predominates over hypertrophy. For this reason, the strength of the heart should not be abated, but rather encouraged, by a nutritious diet, embracing a fair proportion of animal food. Liquids must be sparingly taken, and fats must be shunned, if there is any tendency to fatty degeneration. Nux vomica or Strychnia, in minute & long-continued doses is recommended by Dr. Corson, to increase

the muscular power of the heart. Plethora should be treated either by bloodletting which is of very questionable propriety, or better by saline purgatives. Anæmia should be treated by tonics & nutritious diet. If the heart is weak, its action disturbed or intermittent, Digitalis often proves valuable. Small doses of Bella Donna — Hydrocyanic acid — Aconite, or Opium, may fulfill the same indication of increasing the strength, & regularity of the

heart's action. Remedies are to be employed if cerebral congestion occur. If the affection be prolonged to an advanced stage, general Dropsy makes its appearance: giving great inconvenience to the patient; and generally not only foreshadowing a speedy and fatal termination, but tending to hasten the end. Its relief is, of course, difficult, the cause being ever active. Yet sometimes the use of proper remedies has been attend-

ed with complete relief. The indications are for resorption of the fluid, and increase of the completeness of the ventricular contractions. For this end, Diuretics, and Hydrogogue Cathartics are employed. Idiosyncrasy must be consulted, for while Diuretics accomplish the object best in some cases, in others they fail altogether, and we must have recourse to Cathartics. Those Diuretics that increase the watery, and not the

solid constituents of the urine should be chosen. They sometimes act more efficiently in combination: Digitalis & Squill — Bi-tartrate or Nitrate of Potash, diluted in an infusion of Juniper — are recommended by Dr. Flint. When Diuretics fail, Hydragogue Cathartics must be used. The most efficient of the class is Elaterium, it must be employed cautiously. The proper dose is from 1/6 to 1/4 of a grain, repeated every two or

three hours, till a sufficient number of watery stools is produced. Much temporary relief may sometimes be obtained by puncturing with fine needles. Though nothing can be done for the cure of the lesions, much may be done to palliate symptoms, & prolong life, & the Physician, while lamenting his inability to heal, must acknowledge that the balances of life & death are in the hands of an All Wise Judge.

An

Inaugural Dissertation

on

Blood

Submitted to the Examination

of the

Board of Regents

of

Faculty of Medicine

of the

University of Maryland

For the degree of Doctor

of

Medicine

by

Geo. L. Blair

Silver Spring, Washington Co.

Maryland

A. D. 1878

Blood

Blood is considered the pabulum of life. Its natural condition is a thick opaque fluid, while circulating in the vessels it varies in color in different parts of the body from a scarlet to a dark purple. It is found on microscopic examination to contain blood globules and many colorless fluid termed the plasma. The globules swim freely in the liquid plasma. These blood globules are of two kinds viz; red & white; the latter the most

in number; the diameter of these globules is from 3000 to 4000 of an inch. The amount of globules is estimated in their semi-fluid condition to make up about one half of the entire mass of the blood. The amount of these globules is estimated to be about sixty billions in the human body. They are composed of a number of proximate principles of which globuline & hematine are of the most important. Globuline is an organic substance almost fluid in its natural condition by union with water and

constitutes the greater part of the mass of the blood globules. The hematine is the coloring matter of the globules. The white globules are less numerous than the red. — The difference being in the human blood one white to three hundred red globules. The white globules are said to be larger than the red being about 2500 of an inch in diameter. It is the opinion of some Physiologists that the white globules are converted into the red by a gradual transformation. This change has never been detected satisfactorily: to prove this change

the opinion of other Physiologists is the reverse which I think is the most reasonable. The plasma contains various elements. Fibrin is one of them it is an important element in the constitution of the blood. The way in which it may be obtained in a tolerably pure form is by gently stirring freshly drawn blood with a bundle of twigs, upon which ~~which~~ the fibrin coagulates. This fibrin is at first red caused by the hemoglobin of the blood globules entangled in it. It can be washed colorless in

a running stream of water preceding the fibrin in its natural condition consisting of white threads having a semi-solid consistency and a considerable degree of elasticity. The coagulation of fibrin takes place in a peculiar manner, it doesnot solidify in a perfectly homogeneous mass, but if examined by the microscope in thin layers it is seen to have a fibroid or filamentous texture. In this condition it is said to be fibrillated. These filaments ~~filaments~~ of which it is composed are colorless

and elastic they are exceedingly minute being not more than $\frac{1}{50,000}$ of an inch in diameter. They are generally interlaced in a kind of irregular network crossing eachother in every direction. Fibrin once coagulated is insoluble in water, and can only be liquefied by the action of an alkaline or a strongly saline solution or by long continued boiling at a high temperature. The quantity of fibrin in the blood varies in different parts of the body. There is more fibrin generally in

arterial than in venous blood. The blood of the veins near the heart contains a smaller proportion of fibrin than those at a distance. The blood of the portal vein contains less than that of the jugular, the Albumen is one of the most important elements of the plasma judging from its value and the great amount of it in the plasma. It coagulates at once on being heated to 160° F., or by contact with alcohol the mineral acids & the metallic salts It exists

naturally in the plasma of the blood in a fluid form. by reason of its union with water. The greater part of the water of the plasma is in union with the albumen: and when the albumen coagulates the water remains united with it: and assumes at the same time the solid form. If the plasma of the blood therefore after the removal of the fibrin be exposed to a temperature of 100° F., it solidifies almost completely so that only a few drops of water remain that

can be drained away from the coagulated mass. Coagulation of the Blood. A short time after the blood has been withdrawn from the vessels, a phenomenon presents itself, viz., its coagulation or clotting. This process commences at nearly the same time throughout the whole mass of the blood. The blood becomes first somewhat diminished in fluidity so that it will not run over the edge of the vessel when slightly inclined; and its surface may be gently depressed with the

finger or a glass rod, it then becomes rapidly thicker and at last solidifies into a uniformly gelatinous mass which takes the form of the vessel in which the blood was received. Its coagulation is then complete. The process usually commences in the case of the human subject in about fifteen minutes after the blood has been drawn and is completed in about twenty minutes. The coagulation of the blood is dependent entirely upon the presence of the fibrin

This fact can be demonstrated in various ways. In the first place, if the blood of the frog be filtered so as to separate the globules and leave them upon the filter while the plasma is allowed to run through; the colorless filtered fluid which contains the fibrine soon coagulates, while no coagulation of the globules takes place on the filter. As soon as the clot has fairly formed it begins to contract and diminish in size, as the contraction proceeds the albuminous fluids begin

to be pressed out from the meshes in which they were entangled, a few isolated drops first appears on the surface of the clot. These drops soon increase in size and become more numerous. When blood is first drawn or when it first begins to coagulate it adheres to the sides of the vessel into which the blood was drawn, but as its contraction goes on its edges are separated from the sides of the vessel. This exudation continues for ten or twelve hours the clot becoming firmer

and the expressed fluid more and more abundant. When blood is drawn from the arm and doesnot coagulate freely the globules will sink to the bottom of the mass giving to the top surface a white like appearance called the buffy coat. This is mostly a sign of acute inflammation. The blood is said to be cupped when the upper surface contracts and the edges separate from the sides of the vessel and curl over towards each other.

There are two kinds of blood viz; arterial and venous, it is by the arterial that the oxygen is carried into the system, & by the venous that the carbonic acid is removed from the system; the arterial and venous differs from each other in color, the temperature of the blood varies in different parts of the body, in the hepatic vein it is said to be 107°, in the aorta 105°. it is warmer in the right than in the left ventricle, this is owing

to the blood being cooled in the lungs during decarbonization. The entire quantity of blood existing in the body has never been very accurately ascertained. Weber and Lehmann, ascertained as nearly as possible the quantity of blood in two criminals who suffered death by decapitation, in both of which cases they obtained similar results. The weight of the blood is in proportion to the entire weight of the body by some Physiologists as 1 : 8; Hoffman

AN

Inaugural Dissertation

ON

Yellow Fever,

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Frank H. Welty,

Of

Baltimore Maryland.

Session of 1867 & 68. 1868.

Yellow Fever.

The gravity of my task nearly overpowers me when I think of undertaking to describe a disease which so well conceals its Materies Morbi that it has baffled the united wisdom of all the Medical Faculty; and is only recognized after it has secured such a firm hold on its Victim, that it is almost only a question of the former habits of the patient, and his constitution, whether he will survive the attack of this

fatal Disease or not, But I will try to give the opinions of the best informed on the subject, such as I have read & also what little I have seen in the Balto Infirmary during the Summer of 67. — This Disease has been called by a variety of names. One of its earliest was "Mal de Siam" because it was thought to have originated in Siam. "Malignant Pestilential Fever" is another & "Tropical continued Fever &c. Among the many names suggested by systematic writers the most significant are Typhus Icterodes, Febris Maligna biliosa Americae, Causus Tropica Endemica &c Yelow Fever however is the most common name

amongst English, French & American writers on account of the most striking phenomenon characterizing this disease, which is the excessive yellowness of the skin. The name has this great advantage that it simply states a striking symptom without suggesting any theory of the causes of the Disease. This is an affection existing only during the hot weather. At the first approach of Chilling Frost this deadly enemy of man begins to disapear. A great many have contended that Remittent & Yellow Fever are only different forms of the same disease the difference being that Yelow Fever is only a more malignant form of Remittent. But this cannot be correct I think from the

following facts. It is true that the one disease may exist without excluding the other in the same person, and that Remittent Fever may sometimes assume so many of the symptoms of Yellow Fever that it is hard to determinate between the two diseases, but they are certainly different diseases. Yellow Fever does not end in Intermittent nor is it characterized by remissions as Remittent Fever is —

One attack of Yellow Fever in a very large majority of cases exempts from another, while if a person expose himself to the Malarious Emanations he may have an attack every year —

The Remedies which have such curative effects in Remittent Fever do not exert near the same influence in yellow Fever though they

have some good effects — Yellow Fever as a rule exists in large towns, which, Remittent we know is generally found in the Country — It has been found without a doubt the cause of Yellow Fever is portable which is not the case in Remittent.

Lastly Yellow Fever is known to prevale when Remittent is utterly unknown & per Contra it exist in large number of cases milder than the milaist form of Remittent — whom some contence that Yellow Fever is only a malignant form of Remittent —

The Lesions of this disease are not constant; so we cannot rely on the Anatomical character for an explanation of the cause of Death. The Stomach

Intestinal Canal & Liver are most commonly affected. The stomach when affected presents the usual appearance of Inflammation with thickening of the coats & also a collection of dark matter which is called Black Vomit. This has been found to be nothing more than extravasation of Blood changed by the action of the acids of the Stomach. This has been produced by experiment in a open vessel by the use of the acids of the Alimentary Canal on the Blood. There are no changes or alteration of the Pyrexia Pattern as in Typhoid Fever, often no changes anywhere in the intestinal canal, only the marks of slight inflammation. The Liver presents the most marked change, but this is by no means uniform

It generally assumes a yellow or ochre colour. Sometimes it hard & crumbles between the fingers if pressure is made; there again it is very soft. In the two cases of the Infirmary the effects of the disease were as apparent on the liver as in other parts of the system. In one, the liver for two thirds of its extent was of a straw colour, while the remaining portion was changed but little. The other patients liver was of different shades of yellow throughout its whole extent.

Yellow Fever

is divided into three stages by the most of Authors — First — The febrile period — Second — The stage of Calm — Third — Stage of Colapse. — This in cases

that terminates favorably is the beginning of Convalescence. —— The attack is generally abrupt; but in some cases it is preceded by several days of languor & lassitude then followed by a more marked chill, then flushings of heat followed by the febrile symptoms which are more marked. This is the beginning of the Febrile Period. It is accompanied by the most intense pain in the Lumbar region, the Loins & the calves of the legs, also headache in the Supra Orbitral region. The mind is generally clear, the patient giving correct answers to all you may ask him. The pulse rarely rises above 100, it being fomer often below the normal standard than above it. The face presents

a very peculiar appearance, there is an ill defined dread of something expressed by the features of the patient. This look has been found on the features of all the sufferers of this disease. It has even been noticed on the face of the little innocent which but a few days before reflected only emotions of infantile joy or grief but now now changed by this fearful disease. Occasionally you find patients delirious from the very beginning of the disease rising up from their beds to escape from some danger, which they imagine threatens them if they remain in bed. We had such a case here & he remained so until a few hours before his death. This disease has assumed different types in the epidemics

which have raged in this country. Formerly the disease assumed a Typhoid form, But the epidemic which has just run its course in the South had a constant tendency to congestion of the Brain in almost every case –

The first stage of the Febrile Period generally lasts from fifteen hours to two or three days During all this time the patient generally suffers the most intense pain, so much so that it has been said by a patient that to sympathize with one suffering, you must experience the disease. After the febrile period comes the stage of Calm. —

In grave cases this is very deceptive; generally all pain ceases the febrile symptoms abate, the pulse falls to the normal standard

or even below it, and you may think the crisis was past, but such is not the case. This period generally lasts several hours. The skin is moist and cool, the pulse compressible, and irregular showing a weakened circulation. The disorders of the digestive system are now shown. The ejection known as Black Vomit is now thrown out of the Stomach in all Fatal cases, and in some that do not terminate so. It is first white consisting of the fluids of the stomach, but gradually become black by the admixture of Blood. It is ejected not by the usual effort of vomiting with straining and muscular exertion, but by simple regurgitation. It comes out without any apparent effort on the part of the patient.

Sometimes in fatal cases it has been known to be thrown to a distance from the bed even the persons of the attendants; and so sudden was the outpouring that they had not time to get out of the way. This vomit is so acid that it causes the skin to desquamate in the neighbourhood of the throat; mouth and lips, and in this way adds to the suffering of the patient. The vomit in fatal cases generally ceases 12 to 24 hours before death. The tongue becomes dry & cracked or red but sometimes retains its natural colour. Diarrhoea in this or the first stage is rare. The evacuations sometimes are of a semilucon colour to the matter vomited. The Urine is very often loaded with albumen, but rather lately

this has attracted but very little attention
Blair noticed that in 500 fatal cases
Albuminuria existed almost constantly.
Uraemia is of frequent occurrence & a scanty
secretion of urine shows a fatal tendency
It is in this stage that the yellowness of the
skin attracts attention, the conjunctiva becomes
injected and of a yellow colour and shows
beyond doubt (if there was any before) that
it is a case of yellow fever. This yellowness of skin
exists in a much larger number of cases that
terminate fatally than those that get well
Hemorrhage from various in the body & from
the mouth, nostrils, bowels and ~~body~~ even
from the <u>Ears</u> and holes for earrings is of
very frequent occurrence —

Delirium may exist in the first stage and disappear in the second. As a rule when it occurs after the first stage it is towards the close of life. Muscular prostration is very great though they are remarkable exceptions. In a case that I recall of "a soldier performed duty until interruption by the ejection of Black Vomit;" in another "the patient shaved himself on the day of his death" and a third a shoemaker nearly finished a shoe on the day that terminated his life. ——— The third stage or that of Collapse is characterized by great prostration and apathy. The patient breathes in a sighing or gasping manner, the pulse is slow and irregular, the extremities are cold

In some cases there is a low delirium, in other the mind remains clear to the last. It was in this state that one of the patients who died here remained until an hour or so of his death. In other cases was more or less delirious until the last; indeed at times he could hardly be kept in bed by the united exertions of several men. ——

This stage is also the stage of convalescence in those cases which terminate fatally, but relapses are very liable to occur. In epidemics there are a large number of cases affected only by a slight chill and a little febrile action then recover in a few days. Malignant cases are those in which Black Vomit & great prostration occur. Abnormal deviation less

than a week. — Causation —— From the circumstance under which yellow fever occurs it seems to show that it requires a special cause. Whole volumes have been written on the subject — and I have read all that I could on the subject — but — have not gained much light — on the subject. I must confess. Writers are very much divided about its contagiousness. It spreads too rapidly in an epidemic for the contagion to be transmitted from one person to another as in smallpox, at the same time people of a large tract of country will be affected with the disease simultaneously. Then it occurs only in tropical regions during the hot weather & year after year cases are more or less numerous in the same place as New Orleans &c

Whenever Yellow Fever is found in Northern Cities it can be traced to infected travelers or fomites. The attendants of patients away from the scene of the Epidemic are rarely attacked. — Flint relates a case in which a Spaniard Don Cabanellas by name slept a night with his children in a Lazaretto for which he was paid $1200 and made Physician to the Royal Household. fifty Galley slaves who also submitted themselves to the same test had their term remitted one year. Finally complete seclusion will not prevent one taking the disease. Formerly as a rule it attacked only the unacclimated, but in the epidemic which raged last in the South all suffered alike

Of the nature of the disease (its specific poison)

we know little except that it originate out side of the body. It is rarely found above 40 deg. North latitude or below 20 deg South latitude It is chiefly found along the Gulf of Mexico and West Indies And more in the Eastern than the Western Hemisphere ——

Diagnosis — This is very difficult unless the physician is very experienced, but as the languor and lassitude increase, then pain in the loins and calves of the legs, of suffusion and redness of the eyes and Cephalgia will soon lead the physician to suspect what the disease is; especialy if these symptoms occur during an epidemic. One of the most suspicious circumstances is the unwillingness of the patient to believe himself unwell, although the same

person may have been one of the most virulent concerning the disease before his illness. The disease of this presents only the character of a Febricula. Such cases would not be considered Yellow Fever except during an Epidemic —

Prognosis — It is very hard to arrive at a just estimate of the rate of mortality in Yellow Fever, it varies with different epidemics. In the epidemic (1867) which last inflicted its ravages on the suffering South the mortality was very great. But as a rule the mortality decreases towards the close of an epidemic. You now can convince your patient out of danger until he has recovered entirely, for a slight indiscretion on his part may so entirely prostrate him that his case will be hopeless

Treatment — As yet there is no specific remedie for this much dreaded disease. The Antiphlogistic regimen with Calomel in large doses has been greatly lauded, also depletion by means of bleeding & depletion by means of cathartics. But from the very fact of the disease being so prostrating, this plan of treatment in my humble opinion would have a tendency to place your patient when such medical mistakes are usually concealed, from the eyes of a sympathising community. The different types of the disease require different treatment. Thus in the malaria forms little is required, but nutritious diet & Hygienic regulations. In the form complicated by Malaria, Quinia is required, indeed Dr Stone says that this remedie

should be given in all cases beginning with small doses and using it as a tonic, He also recommends opium to relieve the intense pain, but this should be used very cautiously as the secretions are very much diminished by the disease and there is a constant tendency to Uræmia. In the malignant form as there is very great prostration this calls for Stimulants. It would be a waste of time for to enumerate the different modes of practice but as the tendency of the disease is death by Asthenia we must support our patient. The patient should have the best of liquors, he being allowed to choose if he has any preference nutritious broths & essences and plenty of cold water to drink. Sponging the body with tepid water helps to allay the intense heat of the body.

The apartment should be well ventilated, but no draught over the patient. I should have said before that milk with ice finely pounded is a very cooling pleasant drink, and also acts as food. The most perfect quiet should reign in the room, none allowed to enter but the nurse and medical attendants. The nurse should be an experienced one and not changed every day for a new one thus distracting the patients attention by a new face to look at constantly. The patient should be carefully watched as the slightest exertion on his part might so fatally prostrate the patients strength that he would never rally. "Carefull attention to the patient sais Dr Flint, will save many a life without any medicine ——

Finis.

AN

Inaugural Dissertation

ON

Aneurism.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Philip W. Boyd

Of

Winchester, Virginia.

Session of 1867 & 68.

Gentlemen -

In considering this subject I propose to devote my thoughts almost exclusively to "external circumscribed aneurism" - since the surgeon can accomplish, but little in the treatment of internal aneurism - We will first briefly examine the physiological anatomy of the arteries, & then proceed with the consideration of aneurism in the order commonly adopted by authors -

The arteries, are the cylindrical tubes which convey blood from the heart to every part of the body - Visible to the naked eye they are composed of three coats: viz

(1) An external or "cellular coat" composed of condensed areolar tissue. 2) Middle coat, composed of elastic & muscular fibres. 3) Lined on internal surfaces with the endothelium & composed of epithelium. The essential difference between the smaller & larger arteries consists in the structure of their middle coat. In the smaller arteries this coat is composed exclusively of smooth circular muscular fibres. In arteries of medium size it is composed of muscular & elastic fibres; while the largest consists of elastic tissue alone. Hence the large arteries possess a remarkable degree of elasticity & little or no contractility.

whilst the small fibrous coat is wanting, & little or no elasticity.

By the term aneurism, derived from the Greek ἀνεύρυσμα, signifying a dilatation, is meant a pulsating tumor containing blood, & communicating with an artery, by the rupture, or dilatation of which it has been produced.

Authors have made various classifications of aneurisms, but we may divide them into, (1) True aneurism, which consists of a sac formed by one or more of the arterial tunics. (2) When an artery has been lacerated without the rupture of the skin, & the blood has escaped into the cellular tissue a Diffused or False aneurism is said to be formed.

(2) Dissecting aneurism: one in which the blood finds its way between the arterial tunics, & may open into the artery at another point. (4) Mixed aneurism is that which arises from the dilatation of one or two of the coats, with division or rupture of the other. (5) Aneurism by anastomosis: which arises from simultaneous wounding of an artery & vein.

Path. Phys. = An aneurism usually commences by the giving way of the internal, & middle coats of the artery at some atheromatous spot, after which the "adventitious coat" is dilated into a pouch; or it may commence by the distension of all three coats: or may be formed

by the dilatation of the internal & external coats, the middle coat having been ruptured: or by the dilatation or hernia of the internal coat, the external, & middle coats having given way. Sometimes an artery may ulcerate & open into an abscess. The sac of which becomes the sac of the aneurism. For whatever manner it may originate the constant pressure of the heart's impulse will gradually dilate the sac. It soon becomes lined with ~~coagula~~ coagula which is deposited in concentric laminæ, of which the outer are the palest & firmest.

Symptoms = If an aneurism be seated in

the neck or limbs it appears as a tumor in the course of an artery & pulsating with it. When you see an aneurism in its early stage you will find the tumor pulsating very strongly - much stronger than in any subsequent stage. When first formed it is not filled with coagulum, & you may empty the tumor by pressure between the aneurism & heart, but the blood will return - so soon as pressure is removed - with a peculiar vibrating thrill. In this state there is scarcely any pain, & no alteration in the limb further than some uneasiness of the circulation producing spasms in the muscles, & perhaps cramp.

For the most state we find the blood coagulating in the interior of the sac & you cannot completely empty the bag by pressure. The pain increases in consequence of the stretching of the nerves as the tumor enlarges. The neuralgic pain caused by the enlargement is often excruciating. The aneurism gradually acquires a considerable magnitude, & the pulsation in a great degree is lost; but it may be observed at some point opposite to the opening of the artery.

Diagnosis. The principal diagnostic points are (1) swelling, wh at first is small, & soft, but increases gradually, & assumes a harder consistency. (2) Pulsation synchronous

with the heart's action. (3) An elevation of the aneurism is perceptible, & always synchronous with the pulsation. (4) A distinct expansion at every point simultaneous also with the pulsation. The impression communicated to the fingers is that the expansion is caused by the injection of a fluid into a cavity. (5) Peculiar thrill felt by placing the finger over the aneurism. (6) Bellows sound is discovered by auscultation. This sound however is not a proof of the existence of an aneurism for it may be produced by a tumor demonstrating the existence of an artery in by pressing an artery with the stethoscope — or it may exist in children.

(7) The history of the case will often assist in ~~diagnosing~~ the diagnosis.
(8) Pain, when the aneurism originates in rupture or produced by pressure upon neighbouring nerves.
Dr Doulton gives the following hints to distinguish tumours situated over arteries & receiving pulsations from them
(1) That they do not pulsate at first when they are small; whereas aneurisms do so from their earliest formation
(2) That a tumour may often be felt into from the artery & that then it will cease to pulsate. (3) That aneurisms are generally soft at first & become hard subsequently; Tumours are generally the reverse.

(4) That tumors cannot be emptied by pressure & that no alteration is made in their consistence by compressing the contiguous stomach. (5) Enlarged lobes of the Thyroid gland may be distinguished from aneurism of the carotid, by their shifting up & down of the fingers along with the larynx in the act of deglutition. (6) Psoas abscess may be known from aneurism by the pressure pain, & weakness in the back & its disappearance when the patient lies down. (7) Pulsating tumors composed of erectile or cancerous growths - especially those connected with bone - are sometimes mistaken for aneurism & from wh it may be hard to discriminate

during life, since they may have the same kind of pulsation, attended with the same whizzing noise, & checked like that of aneurism by pressure on the arteries above =

Progress = As an aneurism enlarges its coats become thinner, but are strengthened by the adhesion of surrounding textures. As the enlargement proceeds these are gradually absorbed. Bone offers no resistance. Aneurisms may prove fatal by making their way to the surface of the body, or to the mucous canal, or to the serous cavities, or into a vein, or into cellular tissue. When an aneurism reaches the surface of the body it never bursts

by laceration, but the skin becomes
indurated; ~~inflammation~~ inflammation
succeeds; the skin becomes red then
livid, & vesicular, & sloughs, & on the
separation of the slough an escape
of blood takes place - Sometimes in
a quite enough to destroy life immediately
, but usually the blood oozes away slowly
in consequence of part of the coagulum
forming a plug. Death may be caused
by pressure on important parts as
the trachea, the bronchial tubes, the
oesophagus, the thoracic duct, or even
upon the spinal cord or through
the brain, & irritation caused by its
impinging nerves, or interfering with
the abdominal viscera. When an

Aneurism opens into a mucous canal, it is generally by a small round ulceration; but when into a serous cavity by a crack or fissure. Death may ensue from the bursting of the aneurism, & escape of the blood into surrounding tissues; that is from a circumscribed aneurism becoming diffused. The extravasated blood may so greatly interrupt the circulation as to cause gangrene, or may be followed by inflammation of these tissues, both are induced by the pressure of the infiltrated blood, & death may be caused by the suppurative fever; but usually assumes a typhoid character. Such cases

The most frequent modes of fatal terminations of aneurisms: there are others, wh, though of extremely rare occurrence, are occasionally met with.

ures = The predisposing cause of aneurism is an atheromatous condition of the coats of the arteries. The exciting cause may be strong mental emotions, violent exertions of the body, or local injury. The latter is most frequent. Men are more subject to it than women & its most frequent between the ages of (30) Thirty & (50) fifty, although it has occurred in children.

Fractures = The most favorite situation of aneurism is in the thoracic aorta;

but if aneurism of the aorta be excluded, we shall find that the popliteal is the most frequently affected. Thus out of 317 cases of external aneurism collected by Crisp, there were 137 of popliteal, 50 of femoral, 25 of common carotid, 23 of sub-clavian, 18 of axillary, 9 of radial, 6 of femoral, aneurism of external & internal carotid & their branches, vertebral, common & internal iliac, brachial & branches, anterior & posterior tibial & branches, all very rare.

Spontaneous cure. Nature sometimes, though very rarely, effects a cure & an aneurism therefore cure is not

accessible to surgical treatment does not invariably terminate fatally. The most frequent manner of spontaneous cure is by the sac becoming filled with a laminated coagulum. The artery becomes impervious as far as its nearest considerable branches & is ultimately converted into an impervious cord. Vitality of distal parts is kept up by collateral circulation. The tumor thus left will be almost entirely absorbed. Sometimes spontaneous cure is caused by violent inflammation, in cases of aneurism, & arising, so that blood in the sac is made to coagulate & the artery obliterated by

The Coagulum - By some accidental violence a clot may be detached from the interior of the aneurismal sac & fling up the orifice of the aneurism - The artery may be obliterated by pressure of the aneurismal tumour, or by a non-aneurismal tumor upon the artery & in case be thus effected -

Treatment: The leading indication in the treatment of aneurism is to lessen the force of the blood from behind, & if this can be accomplished we may look for a radical cure - The two principal means of accomplishing this is by ligation, & compression - To John Hunter undoubtedly belongs

the merit of suggesting the method of ligation now generally adopted. By Hunter's method the aneurism tumor is not interfered with, but the ligating is put on the cardiac side, at a considerable distance from the tumor where the ligating is easily accomplished, & where the parts are more likely to be free from disease. The removal of the tumor being left to the absorbents.

Brasdor's operation is to tie the ligating on the distal side of the aneurism & in its near proximity, & where there are no collateral branches between the ligation, & aneurism.

This operation is only applicable in aneurism of external iliac & proximal carotid, where Hunter's operation cannot be performed — Von Wenderoth suggested tying one of the two terminating branches of the artery, on the distal side of the aneurism — as for example for the case of carotid aneurism. Von Wenderoth treat this method but it proved unfavorable —

Compression — In the meantime stay hæmorrhage by compression is superseding all others — This may be immediate i.e. on trauma itself, or mediate i.e. on the second artery below the aneurism & heart, & so cause the

formation of an active clot - namely the latter method is employed. The pressure must be applied so as to retard the circulation, & not to completely obstruct the artery. This object may be accomplished by various modes, either by "Signoroni's tourniquet", or by "Carte's circular tourniquet". In some cases a common four pound weight may be placed over the artery in the groin with a pad intervening, or what is far better pressure with the fingers - but may apply pressure immediately with an India rubber band - such as our distinguished Prof. of Surgery has adopted.

The advantage of pressure is that it can be discontinued in a moment should it appear expedient, & that there is no fear of that frequent accident of the ligature remaining permanently — if it should pressure fail the knife can still be resorted to. Compression is contraindicated when the integuments are much inflamed, or the limb much swollen, or the aneurism diffused, or when the tumour is rapidly increasing for there is danger of tumour bursting, or the limb becoming mortified. In such cases the ligature must be applied.

The patient should be confined to bed

the excretions by stool, & urine be kept up! the diet be moderate: pain & restlessness be allayed by opium. The pressure should not be severe enough to cause great pain. Should shift the pressure when it becomes painful or irritative - hernia generally exists increase at night - If the case progresses favorably the amelioration in course of three or six days - or perhaps as many weeks - will lose its pulsation & become solid & after which the hernia is slowly absorbed. Ferguson endeavored to block up the cavity by squeezing out the filtration from the sac - the fever emptied the sac

by pressure with his thumb, & then rubbed the walls of the tumor together so as to force some of the filtrin into the cavity -
Some authors recommend promoting the coagulation of the blood in the sac by injecting a solution of persulphate of iron - The tumor will be converted into a solid mass, & a little serum will exude from the puncture -

Medical Treatment = The main object is to be accomplished with opium, venesection, purgatives &c. Bleeding under some circumstances - Light diet - Bodily or mental excitements abstained from - Acetate of lead is said to

nerves. The blood coagulates, & diminishes
the calibre of the arteries.
Never not administer diuretic
purgatives - for they will cause
great excitement, & throbbing of
the arteries =